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HER MAJESTY'S SECRETARIES

OF

EMBASSY AND LEGATION

ON THE

MANUFACTURES, COMMERCE, &c.,

OF THE

COUNTRIES IN WHICH THEY RESIDE.

Presented to both Houses of Parliament by Command of Her Majesty.
May 1870.

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Turkey.

*Report by Mr. Barron, Her Majesty's Secretary of
Embassy, on the Taxation of Turkey.*

Section I.—Introduction.

Mr. Barron to the Earl of Clarendon.

My Lord, *Constantinople, December 1, 1869.*

1. My instructions, as conveyed in Lord Stanley's despatch of 28th September, 1866, were to furnish a Report on the subject of the Turkish finances, especially with reference to four principal branches of investigation. Of these, three have been already reviewed in my Report of 11th February, 1867. For reasons there stated I was obliged to reserve one—the most difficult of those branches—for a later period. This branch—the taxation of Turkey—I am only now able to report upon. The present Report will be devoted to arranging systematically, and to reviewing briefly, the materials which I have been able to procure. The great difficulties of the subject, arising from the paucity of official, and the vagueness of other, information, will be readily believed. The multifarious nature of the taxes has necessitated reference to all parts of the Empire, as the Government itself is not possessed of full information. For the assistance received from Her Majesty's Consuls, especially from Sir Robert Dalryell, Messrs. Palgrave, Stuart, Taylor, Wrench, Blunt, Calvert, Maling, and Holmes, I must in justice express my acknowledgments.

2. The following is the order which I propose to adopt:—

Section I. Introduction.

„ II. The tithe.

„ III. The Verghi tax.

„ IV. The Bedel (military exemption) tax.

„ V. The Saymè sheep and goat tax.

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- Section VI. The Customs duties.
 „ VII. The Excise duties on tobacco and spirits.
 „ VIII. The salt monopoly.
 „ IX. The Tapou and stamp duties, &c.
 „ X. Miscellaneous taxes.
 „ XI. On Turkish taxation in general.

3. As a useful preliminary I have drawn up a glossary of the Turkish terms, and of a few abbreviations, which it will be necessary to use in the course of this Report; as also three original Tables, two of them compiled by myself. The first is a Statement of the new territorial divisions, with the approximative population of some of them, and of the whole Empire, according to the best authorities; the second is a comparative abstract of the financial estimates for three different years, so arranged as to show the aggregate sums derived from taxation; the third is an estimate of the extraordinary expenditure for two consecutive years, as published in August last by the Minister of Finance, being the first of such estimates which has yet, to my knowledge, been made public. The amounts in these estimates have been all reduced from “purses” to their corresponding values in English money.

4. ALPHABETICAL List of the Turkish Terms and of the Abbreviations used in this Report, with an explanation of the same.

Archin or “*Pic.*”—A measure of length varying from 25·70 inches or 67·79 centimètres the cloth “archin,” to 26·34 inches or 66·91 centimètres the builders’ “archin.”

Ashr, also *Ushr*.—The title.

Bédel.—The military exemption tax; also called “*Bedelié askerié*,” &c.

Commune, vide *Kariyé*.—An administrative sub-division.

Community.—Is here used to designate the aggregate members of one creed in any one province or commune.

Damga.—Government stamp affixed to certain home-made goods, and for the purpose of levying duty.

Defterdar.—The accountant-general of a “*Vilayet*.”

Demoyeros.—“Elder” or “Priate,” an elective municipal functionary.

Donoum.—A land measure of 40 “archins” or $87\frac{3}{4}$ square feet = 0·167 acre, 672 square mètres. It is, however, vague and variable.

Hodja Bachi.—A popular term applied generally to the “moultars” of Christian communities.

Ittiar.—Priate or elder; in Greek, “*Demoyeros*.” A member of the Communal Municipal Council. By law these functionaries are elected by the citizens, who pay at least 50 piastres per annum in direct taxes.

Ihtizab.—A generic name for the aggregate of certain indirect imposts. In some places a specific term used to designate duties on sales and gate dues of towns ("oetrois").

Itizam.—The system of "farming" or selling the collection of a tax to private speculators.

Kaimakam.—Lieutenant; an administrative functionary at the head of a "kazà."

Kariyé.—Commune; the smallest administrative sub-division or unit.

Kazà.—An administrative sub-division of the third class, divided into "nahivés" and governed by a "kaimakam."

Kilè.—A corn measure; that of Constantinople is equal to 7.29 gallons, 33.14 litres, or about $\frac{1}{10}$ of a bushel.

Kot.—A dry measure; about two gallons.

L. T.—Turkish livre or Medjidié, a gold coin worth 0.9027*l.* or 18*s.* 0.6484*d.*

Mahallé.—A "quarter" of a town or an urban commune.

Malmudiri.—The accountant of a "kazà."

Medjlis.—Council.

Mouhassibedji.—The accountant of a "sandjak."

Mouhtar.—A chief municipal officer (mayor) elected by each community. There are by law two for each community possessing 20 or more houses in the commune.

Mudir.—An administrative functionary at the head of a "nahiyé" and sometimes of a "kazà."

Mutessarif.—An administrative functionary at the head of a "sandjak."

Mulleym.—A tithe "farmer" or "appaltator," also termed "Ushrdji."

Nahiyé.—A large rural commune, or sometimes an aggregate of several small communes, administered by a "Mudir."

Nizam.—The regular active army.

Oke.—A weight equal to 2.83 lb. 1.28 kilo.

P.—Piastre. The official piastre is $\frac{1}{100}$ of a "L. T." or 2.166*d.*

Purse.—A term used in official accounts to designate a sum of 500 piastres or 4*l.* 10*s.* 3*d.*

Raya.—A non-Mussulman subject of the Porte.

Redif.—The reserve force of the regular army.

Rossoumât.—The name given to some miscellaneous indirect taxes varying in different provinces.

Salyané.—The new tax on property. (*Vide* Section III.)

Sandjak.—An administrative division or province of the second order, formerly termed "Liva," governed by a "Mutessarif," sub-divided into "kazàs."

Spahi.—Formerly the holder of a Government military fief, now a term applied in some places to the "Tahsildars."

Tahsildar.—Government collector of taxes.

Tanzimât.—Reform: specially applied to the aggregate measures carried out in connection with the Hatti Sherif of 1839.

Tapou.—A peculiar feudal tenure of land.

Tchorbadji.—A notable citizen: generally applied to Primates of Communes when Christians.

Timettou.—The new income tax. (*Vide* paragraph 45.)

Ushur, also *Ashr*.—The tithe.

Ushurdji.—The tithe contractor; also "Mullezim."

Vakouf.—A kind of copyhold tenure by which property is held in trust for certain ecclesiastical or charitable corporations.

Vali.—Governor-General: the administrator of a "vilayet."

Vilayet.—An administrative division of the first class, subdivided into "sandjaks." A new code for the administration of "vilayets" was published in 1867, and has been applied to a few of them.

Verghi.—Gift: a tax or tribute raised on property and income. (*Vide* Section III.)

Wakalut.—The system of collecting taxes on Government account ('en régie' as opposed to the system of "iltizam.")

Zaptié.—The police force or gendarmes.

5. STATEMENT of the new Territorial Divisions, with some approximative Estimates of the Population under the immediate authority of the Porte.

Vilayets or Eyalets.	Number of—		Population according to—	
	Vilayets.	Sandjaks.	Various.	Ubcini.
Adrianople, Vilayet of ..	1	5	1,600,000	..
Bosnia	1	8	1,100,000	..
Constantinople ..	1	3	1,000,000	..
Danube	1	7	3,500,000	..
Salonica	1	5	*1,312,974	..
Scutari, Eyalet of ..	1	1	150,000	..
Uscub, Vilayet of ..	1	2	..	..
Yannina	1	5	707,000	..
Total in Europe ..	8	..	12,787,000	9,800,000
Aidin, Smyrna, Vilayet of .	1	4	..	..
„ Adana, „ ..	1	2	205,000	..
Aleppo, Vilayet of ..	1	4	983,000	..
Angora, „ ..	1	3	..	..
Archipelago	1	8	..	..
Bagdad	1	18	..	..
Castamboul	1	5	..	..
Crete	1	4	280,000	..
Erzeroum	1	7	..	..
Hedjaz	1	..	..	..
Hondavendighiar (Broussa)	1	7	*1,060,188	..
Konia	1	5	..	..
Kourdistan	1	5	..	..
Sivas	1	5	..	..
Syria	1	8	1,000,000	..
Mount Lebanon ..	1	..	110,000	..
Trebizonde	1	4	*892,000	..
Total in Asia ..	17	..	17,163,000	16,750,000
Tripoli in Africa ..	1	4	750,000	600,000
Grand Total ..	26	..	30,700,000	27,150,000

N.B.—Cyprus has been lately reduced from the rank of a "Vilayet" to that of a "Sandjak," and attached to the "Vilayet" of the Archipelago.

Neither of the above estimates of the population is to be depended on. The first emanates from "*La Turquie à l'Exposition Universelle, December, 1867*," published by Salaheddin Bey, the Ottoman Commissioner, but is probably excessive. The second estimate, making the total population of the provinces under the immediate authority of the Porte amount to 27,150,000, is taken from Ubicini's "*Lettres sur la Turquie*," and is probably nearer the mark. In the absence of any more certain data, I have assumed the latter figure as the basis of my calculations. The figures of the population of the "Vilayets" are those returned by the Consuls as the present estimated amounts.

Those figures marked thus * are founded on the official registers of the male population, doubling the amounts there recorded in order to elicit the whole population of both sexes. These results cannot be accurate, and are believed to be below the mark, as boys below 4 years are not counted in the "nefouz" registers.

6. ABSTRACT of the Ordinary Budgets for the following Financial Years (beginning on the 13th March).

The amounts are reduced to £ sterling at the rate of 24 10s. per Paise of 500 piastres.

REVENUE.					EXPENDITURE.				
Turkish Year A.D.		1280- 1261-65.	1284- 1263-69.	1285- 1260-70.	Turkish Year A.D.		1290- 1261-65.	1294- 1263-69.	1295- 1260-70.
Chapter.		£			Chapter.		£		
1. Vergah. Tax on property, &c.	...	2,760,325	2,760,325	2,805,535	1. External debt—interest and sinking fund	...	...	...	...
2. Bedel. Military exemption tax	...	549,747	580,432	580,432	2. Service of the "General Debt"	...	...	...	...
3. Tithes	...	3,944,764	5,102,370	4,809,870	3. Various internal bonds and annuities	...	...	...	...
4. Sheep tax	...	1,005,631	1,435,819	1,382,818	4. Floating debt—interest and commission	...	...	...	...
5. Serine tax	...	16,394	29,560	27,311	5. Civil list of the Sultan and accompanying allocations	...	...	...	...
6. Customs	...	1,917,000	1,797,662	1,775,182	6. Vakoufs (charitable endowments)	...	...	...	...
7. Tobacco duty	...	1,057,500	464,886	464,886	7. Pensions and aids	...	...	...	...
8. Silk tax	...	69,804	69,804	69,804	8. Repayments and losses ("non-valeurs")	...	...	...	...
9. Spirituous liquors	...	162,000	183,061	183,061	9. 11. Ministry of Finance—Departments of	...	...	...	...
10. Tapou	...	112,500	100,796	100,796	10. 12. Treasury, Customs, and Forests	...	...	...	...
11. Stamps	...	135,000	86,235	86,235	13. 14. 15. Ministry of the Interior	...	...	...	...
12. Contraband	...	15,426	45,091	45,091	16. 17. Justice	...	...	...	...
13. Judicial fees	...	1,553,159	501,534	510,534	18. Foreign Affairs	...	...	...	...
14. Miscellaneous taxes	...	990,000	627,898	717,898	19. War	...	...	...	...
15. Salt monopoly	...	...	...	...	20. Ordinance	...	...	...	...
Total Taxes	...	13,792,986	13,926,575	13,607,076	21. Marine	...	...	...	...
16. State lands	...	15,106	78,043	78,043	22. Commerce	...	...	...	...
17. State forests	...	15,750	63,112	63,112	23. Public Education	...	...	...	...
18. Ministry of Marine—special revenues	...	57,942	82,611	10,732	24. 25. 26. 27. Telegraphs, Post Office, and Mines	...	...	...	...
19. " Commerce	...	4,172	6,333	5,868	28. 29. 30. Ministry of Police	...	...	...	...
20. " Police	...	...	5,868	5,868	31. 32. Ministers without portfolio and Supreme Council	...	...	...	...
21. Sanitary dues	...	71,298	17,874	17,874	33. 34. Donations of Hedjaz and Yemen Provinces, Suré (gifts) sent to Mecca	...	...	...	...
22. Mines	...	...	69,036	69,036	Total Expenditure	...	...	...	...
23. Telegraphs	...	128,511	135,256	135,256	Revenue	...	...	...	...
24. Post Office	...	30,618	30,618	30,618	Balance—	...	...	...	...
25. Various	...	20,905	206,118	206,148	Surplus	...	...	...	...
26. Tribute of Egypt	...	360,000	673,040	673,040	Deficit	...	...	...	...
27. " Wallachia and Moldavia	...	36,000	36,000	36,000	Total Ordinary Revenue	...	...	...	...
28. " Servia	...	20,760	20,760	20,760	...	...	...	...	...
29. " Samos	...	3,600	3,600	3,600	...	...	...	...	...
30. " Mount Athos	...	653	649	649	...	...	...	...	...
Total Ordinary Revenue	...	14,559,855	15,415,555	15,110,905	...	...	...	...	...
Chapter.		£			Turkish Year A.D.		1290- 1261-65.	1294- 1263-69.	1295- 1260-70.
1. Vergah. Tax on property, &c.	...	2,760,325	2,760,325	2,805,535	1. External debt—interest and sinking fund	...	...	...	...
2. Bedel. Military exemption tax	...	549,747	580,432	580,432	2. Service of the "General Debt"	...	...	...	...
3. Tithes	...	3,944,764	5,102,370	4,809,870	3. Various internal bonds and annuities	...	...	...	...
4. Sheep tax	...	1,005,631	1,435,819	1,382,818	4. Floating debt—interest and commission
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6. Customs	...	1,917,000	1,797,662	1,775,182	6. Vakoufs (charitable endowments)
7. Tobacco duty	...	1,057,500	464,886	464,886	7. Pensions and aids
8. Silk tax	...	69,804	69,804	69,804	8. Repayments and losses ("non-valeurs")	...	...	...	...
9. Spirituous liquors	...	162,000	183,061	183,061	9. 11. Ministry of Finance—Departments of	...	...	...	...
10. Tapou	...	112,500	100,796	100,796	10. 12. Treasury, Customs, and Forests	...	...	...	...
11. Stamps	...	135,000	86,235	86,235	13. 14. 15. Ministry of the Interior	...	...	...	...
12. Contraband	...	15,426	45,091	45,091	16. 17. Justice	...	...	...	...
13. Judicial fees	...	1,553,159	501,534	510,534	18. Foreign Affairs	...	...	...	...
14. Miscellaneous taxes	...	990,000	627,898	717,898	19. War	...	...	...	...
15. Salt monopoly	...	...	...	...	20. Ordinance	...	...	...	...
Total Taxes	...	13,792,986	13,926,575	13,607,076	21. Marine	...	...	...	...
16. State lands	...	15,106	78,043	78,043	22. Commerce	...	...	...	...
17. State forests	...	15,750	63,112	63,112	23. Public Education	...	...	...	...
18. Ministry of Marine—special revenues	...	57,942	82,611	10,732	24. 25. 26. 27. Telegraphs, Post Office, and Mines	...	...	...	...
19. " Commerce	...	4,172	6,333	5,868	28. 29. 30. Ministry of Police	...	...	...	...
20. " Police	...	...	5,868	5,868	31. 32. Ministers without portfolio and Supreme Council	...	...	...	...
21. Sanitary dues	...	71,298	17,874	17,874	33. 34. Donations of Hedjaz and Yemen Provinces, Suré (gifts) sent to Mecca	...	...	...	...
22. Mines	...	...	69,036	69,036	Total Expenditure	...	...	...	...
23. Telegraphs	...	128,511	135,256	135,256	Revenue	...	...	...	...
24. Post Office	...	30,618	30,618	30,618	Balance—	...	...	...	...
25. Various	...	20,905	206,118	206,148	Surplus	...	...	...	...
26. Tribute of Egypt	...	360,000	673,040	673,040	Deficit	...	...	...	...
27. " Wallachia and Moldavia	...	36,000	36,000	36,000	Total Ordinary Revenue	...	...	...	...
28. " Servia	...	20,760	20,760	20,760	...	...	...	...	...
29. " Samos	...	3,600	3,600	3,600	...	...	...	...	...
30. " Mount Athos	...	653	649	649	...	...	...	...	...
Total Ordinary Revenue	...	14,559,855	15,415,555	15,110,905	...	...	...	...	...

7. ABSTRACT of the Extraordinary Budgets for the following Financial Years.

The amounts are reduced to £ sterling at the rate of £4 10s. per Piastre of 500 piastres.

Chapter.	1868-69.		1869-70.		Chapter.	1868-69.		1869-70.	
	£	..	£	..		£	..	£	..
1. Surtax on the tithe ..	877,500	..	831,375	..	1. Amount of base coinage withdrawn from circulation ..	75,600	..	75,600	..
2. Produce of base coin melted down ..	34,020	..	34,020	..	2. Loss of revenue in Crete ..	77,629	..	77,629	..
3. Surplus on the ordinary Budget ..	105,741	..	..	..	3. Charges on sundry short loans ..	132,530	..	132,530	..
4. Part of the temporary loan advanced by the Société Générale in 1868 (5,000,000l.), assigned for balancing the accounts of the year 1868-69 ..	2,328,759	..	..	..	4. Annuity payable on the advance of 5,000,000l. by the Société Générale ..	864,320	..	1,372,311	..
Total Extraordinary Revenue ..	3,346,020	..	865,395	..	5. Cost of steamers ordered in London for Customs service ..	..	..	21,861	..
					6. Extraordinary expenditure in Bosnia and Cyprus ..	136,980	..	130,045	..
					7. Charge for support of irregular troops ..	85,747	..	82,904	..
					8. Extraordinary expenditure in the administration of Crete ..	270,000	..	75,128	..
					9. Reconstruction of the Ministry of War ..	36,250	..	45,000	..
					10. Support of Redifs remaining under arms ..	666,486	..	52,807	..
					11. Manufacture and purchase of arms and ordnance stores ..	381,141	..	69,840	..
					12. Fortifications of Erzeroum ..	67,500	..	67,500	..
					13. Marine Department—various works and purchases ..	232,290	..	295,097	..
					14. Guarantee of interest on railways ..	255,186	..	255,186	..
					15. Construction of roads at Scutari in Albania ..	..	..	22,500	..
					16. Ditto from Trebizonde ..	22,500	..	22,500	..
					Total Expenditure ..	3,346,020	..	2,757,330	..
					Deduct Extraordinary Revenue ..	3,346,020	..	865,395	..
					Balance—Deficit..	..	..	1,891,935	..
					Add the Deficit on Ordinary Budget..	..	..	456,521	..
					Gross Total Deficit on 1869-70 ..	..	..	2,348,456	..

8. The official Ordinary Budget for the present year closes with a deficit of 456,521*l.*, the Extraordinary Budget, with one of 1,891,935*l.*, making a total deficiency of 2,348,456*l.* on the year. It is certain that this amount at least must be borrowed in the course of the year, and that a much larger sum must consequently be added to the public debt. It is also intended to redeem the floating debt, which is officially acknowledged to have been 5,841,324*l.* on the 12th of March last. To effect this in addition, will require a gross effective sum of 8,189,780*l.* It may, however, be presumed, that this sum is really under the mark, as a loan of 12,000,000*l.* effective has been actually negotiated, and was only broken off by refusal of the contractors to ratify it. A large annual increase of debt is at present, and has been for many years a normal feature, still unfortunately without any improvements, save useless palaces and iron-clads to show for it.

9. The fact of an ordinary deficiency of revenue, quite irrespective of the extraordinary drains entailed by wars and insurrections, must be admitted. To elicit the amount of this deficit, is not so easy. The official Budget would have us believe, that it is only 456,521*l.* for the present year, but admits 941,736*l.* of extraordinary expenditure not connected with the repayment of capital borrowed. Much of this expenditure, such as naval works, and purchases, guaranteed interest on railways, the Erzeroum fortifications, &c., if extraordinary, must be really permanent for many years to come, and must be more likely to increase than to terminate. On the other hand, the main element of extraordinary revenue, the increase of tithe, must by law cease in 1871. In my humble judgment, the real permanent financial deficiency would stand thus, according to the official figures themselves:—

Annual Ordinary deficit for 1869-70, as admitted by Minister	£ 456,521
Annual expenditure described as "Extraordinary," but likely to be permanent	941,736
Estimated Annual deficit	<u>1,398,257</u>

That the deficit has been of late much more than 456,521*l.* per annum, is proved by the following official figures:—in 1864-5 the annual charge for the debt was set down at 4,283,795*l.*, and in 1869-70 at 5,136,817*l.*,

showing an increase of 853,022*l.* in five years. Supposing the corresponding capital to have been borrowed at 12 per cent., the above sum would represent a capital of 7,080,000*l.* borrowed in five years, or a gross deficiency of 1,416,000*l.* per annum. It is true that the Cretan insurrection must be held to account for a part of this deficiency. On the other hand, it is probable that the charge of the debt, like most of the expenditure, has been under-estimated.

10. This is the place in which to explain in a few words, "What is a piastre?" Stated alone this is not a determinate value, as there are four different currencies in circulation, all called by that name, but varying slightly from each other in value, and fluctuating in their relative values to each other. In Constantinople and in the Asiatic provinces the copper piastre is a legal tender where it is not otherwise stipulated, and is often the actual medium of payment of Government salaries, &c. Those who have interest enough, however, manage to get their salaries paid in gold piastres, by which they derive a profit of 10 per cent. above the smaller functionaries. In some European provinces the "bechlik" currency, an alloyed metal, half silver, half copper, is the basis of all transactions. The current commercial medium of exchange is the gold coin, commonly called Turkish livre, divided officially into 100 piastres.

The following are the principal values, reduced to their equivalents in English:—

	£	s.	d.
L. T., the Turkish livre, or gold Medjidié ..	0	18	0·64
P., piastre, the gold official, 100 to L. T. ..	0	0	2·16
" " the bechlik, 105 to the L. T. ..	0	0	2·06
" " the copper, about 110 to L. T. ..	0	0	1·97
Purse, a sum of 500 piastres, gold ..	4	10	

Section II.—*The Tithe.*

STATEMENT of the Estimated Produce of the Tithe for the following Years in the whole Empire, and in some of the Provinces, in £ Sterling.

	1859-60.	1863-64.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.
Whole Empire* ..	£ 2,844,515	£ 3,713,139	£ 3,944,768	£ ..	£ ..	£ 4,014,857	£ 5,102,370	£ 4,809,870
Vilayet of Adrianople	427,909	623,580	797,655	..
" Danube	459,425	458,469	580,857	879,054	1,093,189	..
" Bosnia	166,900	159,300	197,100	189,000	..
" Salonica	570,870	427,410
Sandjak of Rouschouk	270,000	..
" Varna	172,727	..
" Toulcha	130,419	..	..	..
" Adrianople	130,448	130,448	130,648	107,732	100,389	176,250	..
" Monastir	80,370	80,370	..	79,380	113,400	..	..
" Salonica	108,000	166,270	176,870	122,120
" Scutari	19,361	18,459	12,983	19,419	22,758	..
Epirus, 3 sandjaks	75,600	74,700	85,500	72,727	82,800	88,200	..
Thessaly, 2 "	61,200	70,200	98,100	128,700	103,500	..
Vilayet of Adana	52,200	60,300	55,350	62,550	60,300	40,500	..
" Atlin	331,200	203,400	293,950	363,000	327,250	..
" Aleppo	162,300	150,300	144,000	157,950	153,000	95,300	..
" Crete	From	135,000	to 153,000	..	..	..	..
" Erzeroum	139,000	154,000	136,000	..
" Kourdistan	146,472	..	..	..
" Syria	From	182,871	to	251,100	..
" Trebizonde	101,458	96,042	91,459	91,459	109,364	117,000	..
" Tripoli	23,650	..	..	..
Sandjak of Bighà	27,456	..	..	..
" Cyprus	45,000	49,500	53,000	59,300	54,360
" Rhodes	7,650	..	..	..

* The figures here recorded for the whole Empire do not include the additional amounts expected from the increased rates levied, viz., 15 per cent, for 1867-68; and 12½ per cent. for the four succeeding years.—Vide paragraph 12.

12. The tithe or "ashr" is a tax of one-tenth on all agricultural produce raised in the country, especially on corn, oil, grapes, tobacco, and cotton. Many other articles, such as timber, silk, cocoons, &c., are also chargeable with tithe; but these tithes are levied and recorded under separate heads. From the earliest times a similar tax has prevailed in all Mohammedan countries excepting Egypt, but originally at the rate of $\frac{1}{10}$, or $2\frac{1}{2}$ per cent. In 1867 it was raised for that one year to 15 per cent. of the produce, as an equivalent for an improved freehold title given to the holders of "tapou" property by the law of 21st May, 1867, which deprived the State of its right of succession ("mahlul") to such property when direct heirs were wanting, and for the four succeeding years to $12\frac{1}{2}$ per cent. The tithe on tobacco is levied quite independently of the Excise duty on consumption. On corn the "ashr" is generally paid in kind; on other produce generally in money. On grapes the tax falls very heavily, being 35 paras per 100 okes, or over $\frac{1}{4}d.$ per lb. Garden produce is free. This tax constitutes the principal item of the Turkish revenue, being estimated to produce, with the "surtaxe" of $2\frac{1}{2}$ per cent., 5,641,245*l.* for the present year. There is no record extant or attainable from which to elicit the real proceeds of the tithe during any one year. Still it is known that the proceeds increased generally in 1867, but have fallen off materially in the present year.

13. This tax is not collected directly by Government; but the right of collecting it is sold annually to the highest bidder during the course of the spring. The speculators who purchase the tithes are called "multezim," *i.e.*, "appaltators," or farmers. One of these, after having bought a whole "sandjak," will sell his bargain in lots to others, who will again sub-divide their lots into "nabiyés" and villages. On each of these sales and sub-sales profits must be made, so that the State sells that for 50 which finally produces 100. The profits made in this way by the higher contractors are known to be enormous, and have been the foundation of the largest fortunes in Turkey. This traffic is generally pursued by "rayas," or even foreign subjects, but always requires for success the assistance and connivance, often the secret participation, of an influential Turk at headquarters.

14. During the quinquennial period, from 1861 to 1865, the Government, for an experiment, abolished the "iltizam" system, and collected the tax by its own officers ("wokalut"). The annual amount was in some "sandjaks" commuted for a fixed sum, payable directly by the producers into the local Treasury, based on the average of the five preceding years. This mode however proved unsatisfactory, as, if the crops were good, the Government only received the revenue of an average year; if bad, the peasant had no means of paying. In 1866, therefore, the Government reverted to the "iltizam."

15. This system has been denounced by all, or nearly all, competent authorities; by none more than by Her Majesty's Commissioners Mr. Foster and Lord Hobart, in 1861. The Porte itself is fully alive to the manifold evils of the system. These evils are—firstly, that the Government loses from 25 to 50 per cent. of the gross proceeds of the tax; secondly, that the tax is often bought by needy and insolvent speculators, and is then partially or totally lost; thirdly, that the extortions practised by the "ushurdji" are ruinous to agriculture. The labours of the harvest are often delayed till the latter be on the spot to watch the proceedings. The crop has, consequently, to be left standing, or in sheaf, exposed to weather, birds, and vermin, until the tenth has been measured out and separated; fourthly, the "ushurdjis" are, in general, money-lenders at usurious interest, often amounting to 120 per cent. per annum. Thus these men doubly despoil the peasant; for when the latter once begins borrowing he is certainly ruined. Whole districts have thus been, and are now being, first impoverished and ultimately depopulated.

16. Frequently the peasants are bound to convey, without any remuneration, the whole produce of the tithe to the nearest town or shipping port. The "ushurdji" often purposely abstains from calling, in the hope of compelling the peasant to agree to terms always more onerous than the proper tithe, in order to avoid still greater losses in weight, grain, and straw, from the protracted exposure of the crop. The peasant, on his part, always underrates his harvest; and to defraud his persecutor, habitually abstracts some of his own corn stealthily during the long period elapsing before it can be threshed. Proceedings against the peasant, often no less illegal than inhuman, are readily

enforced by the Government itself, for the reason that the usurer and creditor, being a debtor to the Government, all the more easily obtains official support in the prosecution of his own claims, as thereupon may depend his own solvency to Government.

17. On the other hand, the "iltizam" system has certainly some advantages. However vicious in theory, it is proved by experience to be that most advantageous to the Treasury, at least for the time. All attempts to levy the tax directly have failed, through the negligence or peculation of the Government Agents. By the public competition of buyers the Porte believes that it is best secured against fraud. The contractors, although they may oftenest gain, are not unfrequently losers. In practice the peasants are said to prefer the "iltizam," for they are in general subjected to less vexation than when the tax is collected by Government officials. Revenue farming is wrong in principle, but it is certain the cultivators hailed its revival as a boon. The direct collection failed as much from the commuted assessment having been much too high as from the due being required in cash and no longer in kind. Though in theory the heavier of the two, the old system commends itself to the peasant as offering him a better chance of shirking payment than when brought under the close grip of Government officials.

18. This system is more economical for the Treasury than would be that of special tax gatherers, though certainly Government does not benefit to the full extent of the tax levied on the population. Still on the whole the present plan is preferred by the taxpayer to the "wokalut" system for the following reason. The officials or "tahsildars" would on their periodical visits be invariably accompanied by a swarm of police and followers, who would not only be fed and lodged as well as their horses by the villagers, but would also extort with authority as much as they could possibly wring from the peasant. This is the taxpayer's view of the question, and from previous experience it is a not unnatural one, the "multezim" on the other hand possessing no official status, but being rather connected with commerce, proceeds to his work in a business-like way, and cannot afford to make enemies of the people with whom his business lies.

19. In Bosnia the tax is now sold in the province itself at public auction in small lots or districts, so that persons

of moderate means who reside on the spot, and are interested in the people, can purchase; but at the same price preference is always given to the resident peasantry as bidders. At Toultscha the tax is now demanded in money instead of in kind as formerly. The grain tithe is fixed during the spring by estimating the probable value of the crops, and collected when the harvest is over.

20. In the Sandjak of Monastir, the system of quinquennial averages was tried during the years 1861-65, but failed through the vicious mode of assessment adopted. The large majority of the villagers had no voice whatever in the matter. The amount of their tithe was arbitrarily fixed at a higher rate than they had ever paid before. The system of collection by "tahsildars" was then tried, but was laid aside in 1867. The grounds assigned were that, notwithstanding their salary of 4*l.* 10*s.* per month, and the injunctions of the Government, the "tahsildars" got into the habit of living at the expense of the villagers, and were frequently unable to give a correct account of the taxes which they had collected. During the quinquennial period the annual average of the tithe was 80,370*l.* Since the expiration of that period the tithes of 1866 were sold for 79,350*l.* This last adjudication was made to a speculator at Constantinople on easy terms of payment; and previously to the "vakouf" law, whereby an additional charge of 5 per cent. has been imposed upon the produce of persons holding real property. Inclusive of this addition the tithes of the Monastir Sandjak were re-adjudicated to the same speculator for 113,400*l.*, the difference of 34,020*l.* representing the value of the increased rate.

21. The tithe was placed upon its present footing about 1846 in European Turkey. Previously a nominal equivalent to it called "spahilik" or "beylik," was paid by the peasants partly in money partly in kind to the "spahis" or feudal lords among whom the land was partitioned. They enjoyed the right of tithing their respective "timars" or "fiefs," and in return owed military service to the Sovereign. On the introduction of the new system they were pensioned off for life and most of them have now died out.

In Epirus alone there were 15,000 of these "spahis" or "beys." The tithes of this province were sold in 1868 for 88,200*l.*, being an advance of 9,400*l.* on the preceding year, although the rate was reduced from 15 per cent. to

12½ per cent. This increase was owing, in part at least, to a very beneficial change in the manner of selling the tithes, according to which, instead of putting them up to auction *en bloc* they were divided into lots of such dimensions as to tempt local bidders to come forward. The plan answered, and in many instances the villagers or peasants were themselves the successful bidders for their own tithes. By this means the vicious system of sub-letting was much diminished, and in some instances was wholly abolished. The same mode has I understand been resorted to this year with every prospect of like advantage, both to the Treasury and the payer. But the tithe is still kept up to 12½ per cent.

22. In the Danube Vilayet a system was introduced by which the tithes were offered in the first instance to the communes themselves at a valuation deduced from the average tithe of a certain number of preceding years. But such valuation having at least in some localities been calculated too high, this difficulty and that of accustoming the villagers to a new system, led to this system being abandoned. In 1866 the tithes were sold well at progressive but not at exorbitant rates, and the tithe purchasers, as in the years immediately preceding, realized good profits. In 1867 the tithe was advanced from 10 per cent. to 15 per cent. Moreover, when it was put up for sale it was already known that the harvest would be unparalleled. Accordingly immense prices were bid and fair profits were made. The harvest of 1868 was below the average, and that of Western Europe was good; consequently the tithe purchasers of 1868 have generally become bankrupts. There is extreme difficulty in finding purchasers for the tithes of 1869. The tithes are seldom sold in March finally, the purchasers holding back to see the prospects of the harvest. As in the Danube Vilayet the peasant is not permitted to remove a sheaf from the ground before the "multezim" has selected his portion, the harvest was left all over the Vilayet rotting in the fields devoured by birds and vermin; while in Wallachia the crop was continuously being shipped for export. The consequence may probably be a famine next year, and would elsewhere be a rebellion.

23. In the Sandjak of Varna the tithe farmers came forward readily in 1868 and gave very high prices for the tithes. The Government flattered itself that it had obtained an increased revenue on the whole sandjak of 33,363*l.* over

and above 1867 ; but when the time came for collecting, the Government found all the contractors ruined by the transaction and unable to pay the stipulated prices. Everything which they possessed, moveable or immoveable, was seized and sold ; yet, notwithstanding the Government could not collect more than 94,545*l.* out of 172,727*l.* for which they had sold the tithe, thus losing in this single sandjak 78,181*l.* The result is that this year the Government have great difficulty in finding any bidders, and it is feared that a considerable decrease of revenue will be the consequence. In the Sandjak of Roustchouk I understand that the tithes were sold for 270,000*l.*, but only realized to the Government 180,000*l.* after the same severe measures had been applied to the contractors.

24. In the Vilayet of Aïdin it is complained that the mode of tithing cotton is very unjust, as the "multezim" will only value the cotton when standing, so that much of it is overripe and liable to damage from rain before he comes round ; and in the same field cotton pods are valued by him which perhaps never come to maturity, so that in the former case the farmer pays upon damaged cotton ; in the latter, upon cotton which he never collects. The tax collectors often demand 1 or 2 per cent. more than they have a right to. Great injustice is here perpetrated. Members of the tribunals are generally interested in these abuses, so that no satisfaction can be obtained. This is a culture which ought to be encouraged by exceptional measures, such as exemption from tithe for waste lands reclaimed for this crop, free circulation and export.

25. In the Sandjak of Bagdad the tithe seems to be generally replaced by a land tax, based on the number of buckets or water-wheels employed in irrigation. Each wheel draws one leather bucket only. A tax called "rousbukar," of 35 piastres (6*s.* 4*d.*) per wheel, is levied on land within four miles of the town, but beyond this radius the tax amounts to 625 piastres to the north of the town, and 135 piastres to the south, per annum. On gardens the tithe is levied at the rate of one-fifth of the produce ; on lands irrigated by canals at one-third ; on lands watered by artificial irrigation, one-tenth, and on rice lands at one-half the produce. These rates are, however, again subject to very considerable modifications according to the different systems of assessment which prevail in different districts. The summer crops of vegetables and

oleaginous seeds pay an "ashr" of one-third of their produce, save in the immediate vicinity of towns, where the produce is free from tithe. This exemption is grounded on the existence of the "ihtizab," or gate duty, of $1\frac{1}{2}$ piastres per load. At some places there are additional taxes of 75 piastres per plough, and of 75 piastres per head on every labourer engaged in gardens. In the Dileim each water-wheel pays 200 piastres per annum, or half a taghar of wheat and half a taghar of barley. Each date-tree pays $1\frac{3}{4}$ piastres per annum. I need hardly point out the injudicious nature of most of the above taxes. In the Montefik (tributary) districts the tithe is everywhere one-half of the produce. This, however, may be more properly called rent than tithe, being payable to the sheikh of the tribe, who compounds for all taxes by a fixed money payment to the Bagdad Treasury. The new Vali Midhat Pasha commenced his career by abolishing the "rous-bukar" and the "ihtizab," and substituting for them the regular tithe of one tenth of the produce of fields and gardens.

26. The following is the mode in which the tithe is collected in the interior of Asia Minor:—The first havoc made in the little heap of produce awaiting to be taxed is by the "spahi" (tax-gatherer), with his "kiatib" (clerk), and the "tcheslimen" (measurer.) Each takes a copious wallet of produce which they call "yemlik" (refreshment). Next comes the $12\frac{1}{2}$ per cent., the quota of the Treasury, 1 per cent. for the measurer, 1 per cent., and sometimes 2, for the transport of the tithe to the central store, and we may thus calculate the official share to come to at least 15 per cent. After this comes the unofficial tithe which, though not obligatory, is nevertheless contributed by the peasant: such are gifts to the Imam, the herd and the "tcheslimen" of the village.

27. It has been found in Cyprus that, in paying the tithe directly to the Government, some of the village elders who kept the accounts enriched themselves at the expense of their neighbours. These latter, from their ignorance of letters, were unable to check the frauds practised on them; and though they had tamely submitted to be plundered by the "multezim," could not bear to see their fellow-villagers make a profit at their expense. The discontent thus created, though by no means universal, was fostered by the influential "members" of the medjlis of

Nicosia, who, through their creatures, had been in the habit of farming the tithe. They caused "mazbattas" to be circulated among the villagers for signature, praying for a return to the old system, an expedient which produced the desired result. The tithes collected in Crete during the two years preceding the rebellion amounted to 153,000*l.* per annum. For the next two years they have been remitted entirely, and for the two following years reduced to one-twentieth of the produce.

28. In Syria the highest bidders who purchase the right of collection are generally Jews, but sometimes Armenians or Greeks. Mussulmans hardly ever speculate in such enterprises openly, and in their own names, because they find it more advantageous to put forward a "raya," for whom they give security on a secret understanding of partnership; assisting him with their influence in the collection and at the payment, and appropriating to themselves the lion's share of the profits. Three conflicts are thus carried on during the harvest: one between the ostensible collector and the cultivator, with a view of taxing the crops as high as possible; another, between the partners on the division of their spoil; then a third, between the Government and the contractor. The latter sometimes takes refuge in a fraudulent bankruptcy. Thus, in North Syria the Government has now upwards of 8,000,000 piastres (72,000*l.*) of arrears to claim, not one piastre of which will ever be recovered. This great loss would have been avoided under a system of direct collection.

29. In the Province of Trebizonde the tax has been as elsewhere, subject to several modifications. About 1846 a special commission made a valuation of all the cultivated land in the "pachalik," dividing it into "kazàs," which again were subdivided into "tchehirs" and "tchiftliks" (estates and farms). A rough estimate was then made of the average produce of each "tchiftlik," and the sum to be levied on the united kazàs of the province was fixed at 3,200,000 piastres (20,000*l.*) The tax was then sold by auction to appaltators who collected it at their own cost. About 1861 the "iltizam" system was given up, and since that time the tax has been collected by Government inspectors, who are yearly sent at harvest time into the different kazàs, where, in conjunction with the moukhtars and other local authorities, they estimate the value of the

actual crop yet standing, or just cut, and take one-tenth of that value in money. Throughout this vilayet the tithe is still, by a rare exception, collected directly by Government.

30. Many expedients have been proposed with a view of obviating the evils inherent in both the systems now under consideration. That described in the Report of 1861 (page 5) as about to be tried in European Turkey, was based on the principle of a fixed annual sum to be levied on each village for five years, which sum was to be calculated upon the average annual value of the tithe received by Government during the preceding five years. This system would seem to be sound in principle, just and beneficial to all parties, especially to the Treasury. The Government would thus realize for itself the gains now made by the appallators; it would know exactly what it had to rely upon; it would avoid the enormous bad bebts known as "bakkaia" constantly accumulating; it would do away with the frauds and oppression noted above, which reduce the fiscal system to auction-jobbing and the Government agents to the level of touters. The machinery indicated in the report was, however, too complicated for a country like this. A "conseil des dîmes," presided by the Imam or the parish priest, and composed of the moukhtars and other notables elected by the citizens, was to keep a register of the quantity and quality of every crop produced by each farmer, and to apportion to each one the amount of his tax.

31. The above system of quinquennial composition is not that which was generally adopted, but merely that of direct Government collection, either in money or in kind. The Government and the tax-payers were both disappointed with this experiment; at least this is stated in one of the few official revelations on the subject, Fuad Pacha's "Considérations sur l'exécution du Firman Impérial du 15 Mai, 1856," published in the Turkish Red Book of 1868. We read there that, "excepting as regards the tithes, the system of revenue farming had been abolished,* and in respect of them the system of direct collection has been tried for five years, and has not produced the results which were expected therefrom. In fact, on one side direct collection produced a sensible decrease in the revenue; on

* This is not accurate.

the other, the population have almost unanimously pronounced themselves against this system, because they prefer to pay their tax in kind. The Imperial Government has therefore been obliged to revert to the farming system, with, however, an important modification in favour of the peasants. This consists in selling the tithes in every village separately, and thus permitting the 'commune' to declare itself the purchaser at the maximum price attained by the biddings. Another alleviation consists in leaving to the peasant the option of removing the tithe produce himself, or of exempting himself from this charge by a payment in kind, without being obliged as formerly to leave his work when he was most wanted. Finally, to check an abuse often and justly pointed out, every state functionary is prohibited from bidding for the tithes directly or indirectly, under penalties laid down by the penal code."

32. As a tax, the tithe itself is radically vicious in principle, and opposed to all sound economical doctrines, being levied on the gross, not on the net, produce of the soil, and taking no account of the relative cost of production. It must obviously act as a serious check upon agricultural improvement. Thus, I know of one estate on which a large capital has been expended in improvement by an English gentleman, and on which the produce was increased tenfold. The pecuniary result was, however, unfavourable, owing in a great measure to fiscal exactions, especially to the tithe, which rose from 30*l.* to about 300*l.* per annum, and thus absorbed much of the profits of his outlay. So long as this principle is maintained, so long will improvement be crippled: the more so while the tax is kept at its present excessive rate of 12½ per cent. Its repeal and replacement by a fixed land tax would, however, involve immense practical difficulties, and probably resistance from the population.

33. In Egypt alone, the taxation is assessed on the land itself, not on its produce. It possesses already a "cadastre" recording the area of the cultivated and uncultivated land, and the names of the proprietors. In Lower Egypt, which is the more productive of the two regions, owing to the more complete system of irrigation: the fedan of land (4,200 square mètres, or 1·038 acres) pays a land tax of 100 to 130 piastres, or from 16*s.* 8*d.* to 1*l.* 1*s.* 8*d.* per acre. In Upper Egypt, the tax varies from 60

to 80 piastres per fedan, say from 10s. to 13s. 4d. per acre. It may be said that the tenure of land is altogether different, and that in Egypt the tax approximates more to a rent. Indeed, I believe that in theory all the land in Egypt belongs to the State. This peculiarity of Egyptian land tenure is traced to the time of the Pharaohs: vide Genesis, xlvii, 20. "And Joseph bought all the land of Egypt for Pharaoh; for the Egyptians sold every man his field, because the famine prevailed over them: so the land became Pharaoh's."

34. Some writers erroneously attribute the decay of agriculture to the religion or apathy of the population; others to the want of roads, of hands, of capital, or of practical knowledge. These are all only secondary causes. The great primary cause is want of security, in other words, the defective organization of Government. A weak, needy, and unstable executive is a necessary cause of incompetency, cupidity, and corruption in the provincial authorities, therefore of ruin to agriculture. Of all classes, the farmer has most need of justice, security, and encouragement. Yet here he has to bear almost the whole brunt of taxation, a burden often made doubly onerous by the iniquitous mode of collection. Nothing is returned to him in the shape of roads, police, or justice. His produce is taxed over and over again without pity. It is no wonder, therefore, that the rural classes are driven to seek refuge from the tax-gatherer either in the city or the desert. Hence the depopulation of vast corn lands in the interior, which are gradually being abandoned to sheep and nomad tribes, while the cities swarm with able-bodied idlers.

35. The abolition of the "ashk" should be the ultimate object to be kept in view by a reforming Government. Such a consummation must yet, however, be very remote. What is really practicable is a commutation of the tax for a fixed money payment to be settled for ten years in advance, and to be revised at the end of that period. It is objected to this system that, while at present the cultivator, generally a man of small or no capital, is called upon to pay tithe only when he really has produce to sell, under the proposed system, should the crops fail, he would be called upon to pay the tax when he has no means of doing so, and would be thrown into the hands of the money-lenders or completely ruined. In such cases, the only remedy would be a partial or total remission of the tax, a

measure resorted to in all countries in the case of dearth. The losses to the State in bad years would certainly be less than under the present system. They would, however, it is true, not be compensated, as at present, by an increased revenue in fruitful years. This, it must be admitted, would entail a present loss, but as promoting cultivation it would also promote the ultimate expansion of the revenue.

36. Another mode of collection practised in parts of the Danube and Yannina vilayets seems to me still preferable. This consists in selling the tithes of each commune separately, and, if possible, to the commune itself. The commune then, through its legal elective authorities, the "moukhtar" and elders, becomes responsible to the provincial Treasury for a certain sum, and then at harvest time collects the same from its own members, as is found most expedient. The whole body of villagers then takes the place, and derives the profits of the appaltators in contracting with the Government. Even if unprofitable to the communal purse, this arrangement must be advantageous to the villagers, as saving them from the exactions of the "multezim." It is true they would be liable to be defrauded by their own elders, as indeed they often are already. This proves the necessity of a Court of Accounts and a financial inspector in each vilayet, qualified to try causes and audit all accounts in which the revenue is concerned.

37. The tithe is the only practicable land tax in a wild uncultivated country like Turkey. It is, moreover, recognized by the religion of Islam, and, combined with the sheep tax itself, a kind of tithe, was the only tax regularly enforced in the Arab and Turkish Empires. To remove all the abuses attendant on this or any other tax would be impossible. The object of a statesman should be to reconcile together the dictates of equity, the interests of the Treasury, and the national habits. On this principle the best expedient would seem to be an extensive application of the system of compounding for tithe. The system might be applied to whole "kazas," to communes, and even to single farms, either for one or several years in advance, and by a free consent of both parties. This would act as a powerful protection to the cultivator, as an incentive to improvement, and ultimately as a remunerative measure to the Treasury, though, perhaps, at a temporary loss. This

system would tend to increase the taxable material, while the present mode of levying the tithe is like cutting down the tree to gather the fruit.

38. It is interesting to observe the condition of the Turkish islands which are exempted from tithe, viz., Chio, Samos and the twelve small Sporades. These are all improving while Rhodes and Cos, in the hands of the Turkish tax-gatherer are yearly declining. Samos and Chio, after having been ruined and depopulated in the war of 1821-27 have now 48,000 and 70,000 inhabitants, while Rhodes, an island larger than either, with its celebrated harbour regularly visited by several lines of steamers, has dwindled away to a population of 28,000. Cyprus, an island larger and more fertile than Corsica, from having once supported 400,000 souls under the Venetian domination, has now only from 180,000 to 200,000, but is improving. Samos enjoys complete autonomy, Chio only certain fiscal privileges especially exemption from the four great direct taxes as levied by the Turks. In lieu thereof the island pays the two following fixed sums to the Central Government.

Northern Division—			
Orthodox Christians—			
Orthodox Christians	..	..	Piastres. 547,517
Latin Christians	..	..	9,680
Mussulmans	..	..	15,796
			<hr/> 572,993
Southern Division—			
Tribute of the villages, including 400,000			
for mastic trees	..	..	.. 772,318
			<hr/>
Total	..	..	.. 1,345,311

Equal to £12,108 sterling.

The mastic trees exclusively situated in the southern division were, until 1839; the property of, and farmed by the Government. Since that year the Government has ceded the trees and the right of planting new ones to the villagers in consideration of the yearly payment of 400,000 piastres. The indirect taxes, as Customs, spirit, salt, and tobacco duties are levied here as elsewhere. The two fractions of the tribute were apportioned by the "Démogérontie" (Local Elective Council) of each division among the citizens in sums varying from 25 to 1,000 piastres. The labouring class pays from 25 to 250 piastres each, the

middle class from 250 to 500 piastres. The Turks pay relatively less than the Christians.

On the whole, the taxation of Chio is by no means light as the people have, in addition to the tribute and the indirect taxes, to provide for churches, schools, roads, and medical attendance. Their main privilege consists in being allowed to tax themselves. Under this *régime* they have attained a high degree of prosperity and have made their barren island perhaps the best cultivated spot in the Empire. The Chiotes, by nature laborious and enterprising, owe their prosperity partly to their own character, but much more to their immunity from tithe and other exactions. The Porte has unwisely abolished some of these privileges, especially that of collecting their own tribute, and has assigned this duty to the Kaimakam of the island. This is a mistaken policy, firstly, as tampering with institutions which have certainly worked well ; secondly, as wantonly shaking the loyalty of the islanders. The principle of commuting the direct taxes for a fixed annual tribute should rather in good policy be extended to all the islands with certain precautions to secure a good local administration.

Section III.—*The Verghi Tax.*

39.—STATEMENT of the Estimated Produce of the Verghi for the following Years in the whole Empire, and in some of the Provinces.

	1859-60.	1863-64.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.
	£	£	£	£	£	£	£	£
Whole Empire Budget ..	2,224,320	2,745,332	2,728,841	..	..	2,745,620	2,760,525	2,805,525
Vilayet of Adrianople	213,596	213,383	213,418	244,554	237,272	..	..
" Danube	90,000	212,737	221,580	220,323	..
" Bosnia	90,000	90,000	90,000	..
" Salonica	209,383	209,383	..
Sandjak of Adrianople	57,468	57,648	57,726	57,726	57,726	57,726	..
" Drama	34,020	..
" Salonica	55,088	55,088	55,088	55,088	..
" Toulitcha	12,727	..	..	..
" Scutari	From	39,600	to	9,043	..
" Monastir	46,368	..	..	..
Province of Epirus	42,840	55,900	57,250	to	49,950	49,950	..
Thessaly	From	29,700	32,570	..	..	..
Vilayet of Aidin
" Aleppo	74,700	74,700	About	31,500	annually	80,550	..
" Adana	34,200	34,200	74,700	74,700	74,700	35,370	..
" Archipelago	34,200	34,200	34,200	..	..
" Erzeroum	96,883	96,883	..	..	..
" Kourdistan	55,900	67,000	63,000	64,545	..
" Syria	96,509	..	91,264	..
" extra tax	From	236,650	to	190,800	..
" Trebizonde	77,500	..	..	..
" Tripoli	66,965	94,500	..
Sandjak of Cyprus	27,000	..	..	..
" Smyrna	30,600	30,264	27,000	..
" Rhodes	35,100	..	..	..
" Bigla	3,033	..	..	..
" Trebizonde	25,303	..	..	..
" Cos	23,780	34,637	..	..
"	1,075	..	..
<i>Tribute.</i>								
" 12 small Sporades	1,939	..	..
" Chio	12,108	..	..

40. This tax varies in its name as well as its nature in different parts of the empire. The following different names are applied to it, or to certain local varieties or sub-denominations of the tax:—"verghì," "mahtou," "kapnò," "kefaliatico," "salyanè," "emlak," "temrak-verghì," "timettou." It is generally translated as the "property tax," but it would be more properly described as the "tribute." It is, or has been, essentially an "impôt de répartition;" i.e., it is fixed beforehand at a certain amount for every province, and is then apportioned among all the sandjaks, kazàs, and kariyès of the same by the provincial authorities. This apportionment is not an annual operation. The present one was effected about 1845 on the basis of the supposed population. An estimate was made for this purpose in 1844, and the tax was allotted at the rate of one silver medjidié, or 3s. 7d. per head per annum. The quotas have remained stationary ever since, with some exceptions, irrespectively of the altered circumstances of districts; so that, even supposing the tax to have been justly apportioned at the outset, the changes occurring during so long a period must have materially altered its present proportionate incidence.

41. The sub-allotment of the tax among individuals is not governed by any law or fixed principle. In different provinces it partakes of the different nature of a property tax, an income tax, a house tax, and a capitation tax. One Firman of 1866, which decreed an extraordinary addition to the verghì of one-third, seems to intimate that the tax is to be allotted equally among all householders, "making an exception in dealing with indigent persons, in which case their shares are to be made up by the rich and most zealous." In practice it is, or was, levied almost exclusively on incomes derived from real property. Property previously assessed for tithe is continually re-assessed for verghì, so that rural proprietors are doubly taxed in proportion to the inhabitants of towns. Thus, houses which produce a much more certain income than land only, pay one tax instead of two; and capitalists who invest their money in trade have till now managed to escape both taxes. Constantinople still enjoys a total exemption, contrary to all justice and good policy, from this tax. The annual individual apportionment of the tax by the village "medjlises" offers the widest scope for favouritism, for tyranny towards the weak, and truckling

towards the strong. Most of the richer citizens are members of these "medjlises," and thus contrive to throw all the burden on the poorer class.

42. The aggregate quota varies from 40 to 90 piastres on every male of 15 years and upwards. Previously to the promulgation of the Hatti-Chérif of Gulhané in 1839, the people were subjected to the payment, under the common denomination of "verghî," of certain contributions which had been chiefly imposed for the purpose of defraying the salaries of the Moukhtars and Mudirs. On the promulgation of the Tanzimat laws in 1845 all those imposts were abolished by the Government, and for them was substituted a single tax which retained the old name of "verghî," but which much exceeded in amount the united imposts to which the people had been previously subjected. The amount allotted to each territory was, I believe, originally based on some vague notion of the numbers of the population without any reference to wealth. The assessment by individuals was left to the village "medjlises" called Councils of Elders. The Moukhtars, or heads of these Bodies, are held responsible by the authorities for the due collection of the tax, each from his own co-religionists, and generally manage to work it to their own advantage. Sometimes they assess the quota to be furnished by a person on the value of his real property, sometimes on the income which he is supposed to derive from it. Everywhere the apportionment is arbitrary. In short, it may be said that this tax in no way affects the richer classes, the middle but slightly, and falls, so to speak, altogether on the poorest.

43. The "medjlis" of a "Kazâ" is composed of the Kaimakam who presides, of the "Kadi," "Mufti," two or three Mussulman members, and the "Millet-Bachis," or representative of the various "Raya" communities. With the exception of the first three, who are members *ex officio*, the others are ostensibly elected by their several constituents, but, in fact, as a rule, are really nominated by the authorities. The same may be said of the "Mouhtars," or Mayors of communes. Their duty is to look after the general affairs of the "mahallé," or village, to attend the "medjlis," and to collect the taxes. They are not legally responsible for any fiscal arrears, but are frequently made to incur the penalty, should they fall under the displeasure of the authorities. Only those officials appointed by Government are, I believe, exempt from "verghî," but in practice this exemption

is often extended to all functionaries high and low: these, of course, being the most wealthy people in the district.

44. In European Turkey where the old "verghì" is still collected, *i. e.*, everywhere but in a few towns, it is done as follows:—Each commune has four "Mouhtars" (unless it is very small, when there are only two); two of these are Mussulmans. If there are only Bulgarian Christians in the village, both of the others will be Bulgarians; if there are a considerable number of Greeks, one will be Greek; if there are a few Armenians or Jews, they will have no "Mouhtar," but would still be allowed to collect the quotas imposed on their respective communities. The quota for each sect being invariable, the "Mouhtar" of the sect, assisted by such members of the council as are of that sect, partitions the quota among the members of the sect. Where the new "verghì" prevails, it also is collected through the "Mouhtar" of the sect, with this difference, that he cannot partition but must be guided by the official register. The "Mouhtars" receive a small contribution of so many piastres per head from the taxpayers for their trouble and risk, and out of this must make good the deficiency of any individual (which is rarely above L.T. 2, or 3). It will thus be remarked that the sect was, under the old system, practically the unit of taxation.

45. It is evident that the only just basis for a property-tax must be a valuation of real property. This task has already been undertaken, and is slowly proceeding, in different parts of the Empire. The valuation or cadastre hitherto made, called "takrir-i-emlak," is as yet confined to the capitals of some "kazàs" and already served there as a basis for the new "verghì." The old tax has there been replaced by two new taxes or forms of "verghì," called—1st, the "salyané" or "Temrak-verghì," a tax on real property. This comprises:—

(A.) A tax at the rate of 4 per 1,000 per annum, on the estimated fee-simple value of all lands and houses ("immeubles"), whether subject to tithes or not.

(B.) An additional rate of 4 per cent. per annum on the estimated rent of the same tenements if let to tenants. The rent is assumed to be 10 per cent. of the rated value of property under schedule (A). Proprietors occupying their own premises are exempt from this rate, as also land subject to tithe.

(2.) The "timettou-verghì," or income-tax, being 3 per cent. per annum on all gross profits derived from invested capital, Government offices, and industry of every kind, even manual labour. Common labourers pay 30 piastres per annum; journeymen in regular trades from 60 to 160 piastres; other classes according to their reputed means. The same amount will be levied annually for six consecutive years, after which there will be a re-valuation of property and income. Religious orders, salaries paid out of endowments and charitable funds, such as school-masters, parish doctors, hospital attendants, also female servants, are exempt from "verghì." Government officials are now subject to a deduction of one-sixth from their salaries.

46. The new "verghì" is in short an income-tax, based on certain fixed principles. The estimates of income are of course made roughly, and in a manner which in Europe would be considered arbitrary. But owing to the publicity with which the Commission makes its estimates in open "medjlis," to the facts that everyone who chooses may be present, and that everyone thus present officially, privately, or intrusively thinks himself entitled to give his opinion, the result is a verdict pronounced by the whole community and approaching to fairness. This new mode of taxation has been already made more productive than the old "verghì," which itself was an improvement, but also an enhancement of the old taxes abolished in 1845. The produce of this tax has advanced, according to official estimates from 2,224,320*l.* in 1859-60 to 2,805,525*l.* in 1869-70. The figures recorded in my Table for the provinces are not to be implicitly relied on, accurate data being here unattainable.

47. The evils incidental to the old "verghì," viz., inequitable apportionment among provinces, districts, villages, and individuals have been amply exposed in Mr. Foster's and Lord Hobart's Report of 1861. The remedy which has since been applied in the formation of a cadastre, and in the imposition on every individual of a fixed per-centage of his property and income, are there accurately exposed. The experience of the last eight years has, I think, confirmed the judgment which they then passed upon the new system then just announced. "On the whole we are disposed to think it may be desirable that some less violent, less complicated, less tedious, and less costly remedy should be

applied to evils which press urgently for redress, but which for the present seem susceptible of alleviation rather than of absolute cure." The correctness of this opinion becomes more apparent the more one hears of the proceedings of the Cadastre Commissioners in the province. The results hitherto effected by them have been, however, generally beneficial, though probably purchased at too dear a price.

48. In the adjoining Vilayet of Adrianople the cadastre has been established and the new "verghi" levied in the towns of Adrianople and Gallipoli. The work is pushed on very actively in the other towns. Complaints are made that the survey and valuation have been conducted in a careless, arbitrary manner. However, putting aside this alleged defect, which is being examined by a "Commission de Révision," it is generally admitted that the result of the "cadastre" is on the whole likely to prove advantageous to the lower orders. The chief complaints proceed from the great land-owners, whose proportion of the "verghi" is far more considerable under the new than under the old system. The subjoined figures represent the amount of the new "verghi" assessed by the Cadastre Commission of the City of Adrianople for 1869, and the increase revenue produced by it as compared with the old "verghi." The work, however, is costing the Government about 3,000*l.* per annum.

			Amount of Old Verghi.	Amount of New Verghi.	Increase.
Piastres	..	..	610,860	978,231	367,371
£ sterling	..	..	5,498	9,782	4,284

49. In Bosnia no general revision has taken place since the establishment of the "verghi" in 1845. Partial revisions, however, take place every year in different localities. It is worthy of remark, that the rich have always managed to evade payment in proportion to their means, and therefore, as the quota of any locality bears some proportion to its wealth, and as the wealthy manage to shift their burden on to their neighbours, it follows that the small peasants of the richer villages are in general more heavily taxed than those of the poorer villages. The new system will, it would seem, be eminently favourable to the

State, while at the same time it will relieve the poor from a load of oppression. An extremely low valuation has been set upon houses, &c., in Bosna Seraï; yet there is already a profit to the Treasury. In the rest of the vilayet the average "verghi" per house varies from 55 piastres to 90 piastres. The transformation of the tax on the basis of the "cadastre" is here intended, but is proceeding slowly. It is as yet completed only in the Sandjak of Serayevo, and will require perhaps fifty years to be extended throughout the whole vilayet.

50. The cadastre is completed in the towns of the Danube Vilayet, but is extending very slowly to the rural districts. Under the old system the fluctuations of population and prosperity are not understood or allowed for by the fiscal authorities. It is only when the difference is very marked that the communal quotas are modified, then only on the application of the commune itself and perhaps after three or four years' delay. Great difficulties are still placed in the way of the removal of villagers, even from one village to another. Their removal from one province to another of the vilayet is, so to speak, prohibited.

51. The following particulars for the town of Monastir will show the relative yield of the old and new systems in the Vilayet of Salonica.

	Piastres.	Piastres.	£ Sterling.
In 1865 the "salyané" produced—			
Schedule A.—4 per 1,000 on value..	126,906		
" B.—4 per cent. on letting value	54,655	181,561	1,634
The "timettou" or 3 per cent. income tax produced—			
From natives of Monastir.. ..	120,245		
From strangers	23,833	144,078	1,269
Total "salyané" and "timettou".. ..	..	325,639	2,930
Yield of old "verghi" and of shop, "ihtizab" and "damga" duties abolished .. ..	..	261,154	2,350
Increased revenue .. .. .	..	64,485	580

In another sandjak (Drama) of this vilayet the population is estimated at less than 110,000, and the vergi being

permanently fixed at 3,780,000, amounts to $34\frac{1}{2}$ piastres (6s. 3d.) per head.

52. A question is here still in debate between the fiscal authorities and the tax-payers as to the mode of collection. The local Government endeavours to hold the "Mouhtars" and elders responsible for the amounts due by the inhabitants of their respective communes. Were such a pretension admitted the citizens would have to make up amongst themselves the amount due by defaulters, whether absentees, insolvent, or deceased, in the same way as for the old "verghi." On their side the citizens, both Musulmans and Christians, claim exemption from collective liability. They say, "Now that the Government has ascertained by the 'takrir-i-emlak' the quota due by every individual, let the authorities collect the tax through their own agents, and not make us pay one for another." The "Mouhtars" and "Imams" would undertake the duty of collection provided they were paid for their trouble. The Government, however, seems to expect them to give their services gratuitously, or at least to look to their parishes for remuneration.

53. The process followed for establishing the new cadastre is thus described by Mr. Consul Stuart of Yannina:—

"In the year 1860 a Government surveyor and staff of some thirty assistants arrived at Yannina, and at once began the survey and valuation. At the close of 1866 the 'Kazas' of Yannina, Konitza, Paramythia, and Greveno, comprising 686 towns and villages and 20,000 houses, had been surveyed. As regards lands the survey is made in a fashion that leaves a broad margin for correction. Their extent is not measured by instruments, but is ascertained by a kind of bird's eye view and by inquiries from the owners and occupiers. Now, though the 'stremma' is the statute measure of land in that province, estates and farms are popularly estimated by the 'zevgari,' which is the quantity that a peasant with one yoke of oxen is able to cultivate. It is, therefore, an indeterminate quantity, depending altogether on the conditions of the surface and soil. It is largest in the fertile plain and then diminishes with whatever impedes the free action of the plough. Beyond this rough mode of estimation the landlords know nothing of the extent of their lands, so that, without supposing any intentional mis-statement, the information supplied by them

would be of little use to the surveyor. As soon as a valuation is effected, the "salyané" is applied. The first payment of it became due in 1861, and since then it has kept even pace with the cadastre. The surveyor and his staff receive collectively about 4,500*l.* per annum from Government. They have now been eight years engaged on the survey, and will require eight years more, at the present rate of working, for the whole of Epirus, at a total cost to Government of some 72,000*l.* Now, the whole of Epirus does not much exceed 8,000 English square miles, of which more than one-quarter is barren mountain. In the kazà of Yannina the proceeds of the new taxes have been 23,000*l.* as against 8,955*l.* from the taxes abolished, showing an advance of 250 per cent. This great increase is not all clear gain to the Treasury, for the Civil Staff of the Government has had to be materially increased, irrespectively of the heavy expense of the valuator's."

54. The valuation is effected as follows :—"The "métayer" system is general in that province, and three-tenths of the produce is taken as rent. Twenty times the value of these three-tenths is set down as the fee-simple value of the land. Upon this assumed value the "salyané" of 4 per 1,000 is levied. The surveyor, however, does not take as the unit of his calculation the actual tenth, but one deduced by the rule of proportion from the sum at which the tithe is sold. Between this sum and the real value of the tithe there are the accumulated profits of the head and sub—"multezim." Hence the Government is a heavy loser, for to be consistent it is obliged to endorse its own acts, and to accept the registered bid for a tenth as a basis of valuation for the whole.

55. In the Province of Scutari the cadastre is in course of execution, the preliminary step, viz., a map of the country, being taken by Government engineers. Meanwhile the mode of assessing the "verghì" is as follows :—"The "mouhtar" sends a list of all the heads of families in his "mahallé," or village, to Scutari. A certain number of these are selected (generally about ten), and after due notice are assembled under the presidency of an official sent from the seat of Government, for the purpose of allotting to each taxpayer his quota of the contribution imposed on the whole "commune." All this is done in writing, and it is notified to all that whoever has reason to complain can do so at once to head-quarters. Excepting

in the "kazà" of Scutari the quota of each district and village is levied without reference to creed. In Scutari alone the quota of each sect is allotted by the civil authority, and then sub-apportioned by ten or twelve of the elders of each creed. This plan has come into practice this year, and has given rise to few or no complaints.

56. In the Aïdin Vilayet the "kazà" of Smyrna alone has yet received the cadastre. It was here established in 1855, and the tax was originally 4 per 1,000, but was raised in 1862 to 5 per 1,000, or $\frac{1}{2}$ per cent. on the estimated value of all real property. According to the accounts furnished, it produced in 1866-67 about 10,800*l.* for the town, and about 3,600*l.* for the villages. A new valuation was made by a special Commission sent down in 1866-67, which is said to be very much higher than that made originally, although property at Smyrna in general is of much less value than it was in 1855. As the European members of the former Commission were not allowed to take any part in this new valuation, it has led to some differences with the Consuls, which have hitherto retarded its application, so that the tax is still collected on the old estimate. The "timettou" was also established in Smyrna with the cadastre, in a fixed annual sum of 400,000 piastres (3,600*l.*); but as it could not be imposed on foreign merchants it was reduced to 355,000 piastres. It was divided into five or six classes, and levied on all persons, from merchants down to labourers, at rates varying from 25 piastres to 300 piastres (4*s.* 6*d.* to 2*l.* 14*s.*) each. As this tax, however, was not then recognized by the representatives of foreign Powers at Constantinople, it was not enforced until many years after, when nine years' arrears (1855 to 1863) were claimed at once. Many persons originally taxed had in the meanwhile died, become bankrupts, or departed. Consequently, of 3,195,000 piastres due for these first nine years, only 1,562,670 piastres were collected, or at least registered as collected, down to 1867. The "timettou" seems to have given large scope for peculations, and to have worked very badly in Smyrna.

57. At Aleppo a commencement of the cadastre was made some years ago, but the opposition to it on the part of the inhabitants culminated in acts of violence, and led to a final abandonment of the "salyané," after a feeble and futile attempt to enforce it. In the neighbouring towns of

Antioch and Aïntab the cadastre has been completed, but great complaints are made of the partiality shown in the estimation of property, though the tax has not yet been enforced anywhere in this vilayet. The "timettou" has been levied for the first time this year.

58. The vilayet of the Archipelago (capital Dardanelles) comprises the sandjak of Bighà, partly on the mainland and six others among the islands. The total amount of "verghì" imposed on it has been about 96,883*l*. This represents the amount levied in 1868 on those districts which have not yet come under the new system of assessment, and in former years on that portion of Bighà where the cadastre has now been introduced. The produce of the "verghì" for Bighà is set down for 1866-7 at 25,303*l*., and in 1868-9 at 30,237*l*., this increase having been produced by the annexation to this sandjak of Ajabat, Tenedos, Samothrace, Imbros, and Lemnos. For the last twenty-two years in the Province of Bighà, as constituted previously to the formation of the vilayet, the amount of "verghì" has been permanent and invariable, representing nearly, if not quite, the original sum imposed in 1840. Intermediate diminutions on the prayer of the people and augmentations arising from the necessities of the Treasury have occurred, but no general re-adjustment of the tax.

59. The present state of affairs is as follows:—The new taxes of "salyanè" and "timettou" have been levied only in the "kazà" of Dardanelles, and that for the years 1866-7 and 1868. Appeals from the valuations of the Commission and revisions of the same are daily being made. It may be stated that, in districts where Europeans have settled and towns are situated, the "verghì" to be levied under the new system will far exceed that received under the old. On the other hand, in poor districts, such as Lamsaki, Imbros, Samothrace, &c., where no improvement has occurred since 1840, the amounts to be expected will be far short of those actually received. Whether the increase coming from the comparatively prosperous districts will compensate for the loss to be expected from the others is considered very doubtful. At any rate the poorer classes will be gainers by the cadastre, as they will contribute proportionately to their means, and not have to pay, as heretofore, both for themselves and their more influential neighbours. It happens that proprietors who formerly paid 100 piastres "verghì" now find themselves assessed at

1,000 piastres for "salyané." One European proprietor of buildings at the Dardanelles who formerly paid no "verghi" at present contributes 3,000 piastres annually. The only exceptions made in respect of the payment of "salyané" are in favour of the property of mosques, churches, and schools. European subjects have hitherto been exempted from "timettou," although three years ago the Commissioners made a slight show of wishing to tax them. The income derived from charitable foundations or bridges where tolls are levied is also exempted from "timettou."

60. In 1866 special Commissioners sent from Constantinople had begun to draw up a cadastre at Rhodes; but after they had finished it in the town they were recalled, and no attempt has since been made to complete the work. The new taxes have therefore not been applied in the island. The Vali left orders last May with the Mutessarif of Rhodes to try to apply them. The primates were summoned from all the villages and invited to sign a petition in favour of the introduction of the new system. However, on examination, they came to the conclusion that the same would increase the aggregate burdens three or four fold, so they unanimously refused to petition as requested. No application of the sort seems to have been addressed to the primates in the town and suburbs. There the matter rests. A cadastre Commission proceeded to Chio in 1866 and had already accomplished half the valuation of the island, when the work was suddenly suspended in 1867 by order of the Porte.

61. In the sandjak of Bagdad "verghi" is unknown, at least by this name. A poll tax termed "khané" or "kulum," in some respects similar, is levied upon the members of the more settled Arab tribes, whether living in or out of towns, who may be amenable to the control of the Government. Townsmen not being members of tribes are exempt. At present, and under a weak Government, it would be hardly possible to comprehend the nomad and numerous privileged tribes under this tax. The cadastre of real property has, however, been commenced within the walls of Bagdad, but the new taxes have not yet been introduced. In this province taxes are not collected by district or village councils, but by Government officers, excepting alone the Bédel. The establishment of a cadastre in the rural districts is here attended with an additional difficulty, that of ascertaining the rightful

possessors of the soil. It appears that in the Bassora district all the lands at any distance from the walls have been abandoned by their owners because of the extortions of the Montefik Arabs. The lands were then appropriated by the Montefik Sheiks. Of late the power of the latter has declined, and the lands in question have been appropriated as Crown property. Repeated attempts have been made by the descendants of the original proprietors to recover their lands, but in vain. This is a mistake. Lands now held by the Crown to which private individuals can establish a *bonâ fide* claim should be given up at once. With an equitable land tax Government would not be much the loser.

62. The vilayet of Crete is, and always has been, exempt from "verghî." In that of Cyprus an agent arrived in 1867 with a staff of sixteen clerks, charged with the mission of establishing a cadastre of real property in the island. He has been engaged on this occupation ever since. His proceedings are viewed with dislike by the landowners, who are aware that the burden of the new system of taxation will have to be borne by themselves. A consequence of this state of feeling has been a fall in the value of land, and a difficulty in effecting sales. In only one of the kazâs, that of Nicosia, has the cadastre been now carried out, and the "timettou" introduced. The general result seems to be a somewhat larger return, and a much more equitable distribution of taxation. A great part of the work has had to be cancelled on account of its unsatisfactory execution. The gross amount of the "verghî" has been permanent here since 1840. The quotas payable by each village are revised every four years by the Kazâ Medjlises. If complaints are made of decrease of population, or scarcity by any village, its moukhtars present themselves before the Kazâ Medjlis. If the latter admits their claim, a deduction is made from their quota, and the amount is added to that of other villages. The moukhtars are looked upon as responsible for the due collection of the "verghî;" but if they indicate one or more of the inhabitants as defaulters, they can procure its levy by distress or imprisonment. It more usually happens, however, that when a village is in arrears, a "zaptié" is sent to exact the amount due, who lives at the expense of the village till the debt is paid. The money is then quickly

collected by loan or otherwise, in order to get rid of the unwelcome guest.

63. Theoretically, the sum assessed on the vilayet of Erzeroum has not varied since 1840 ; but on three several occasions extraordinary additional rates of 50 and 100 per cent. were levied. As regards individuals, there is no doubt but that the sums which they pay now are far in advance of what they paid formerly, as population and wealth have decreased in Asiatic Turkey. The "timettou" has been introduced into the larger cities, accompanied with a profit to the Treasury, but with great hardship to individuals. The method pursued has been to take an arbitrary sum as capital and another as revenue, based upon hearsay evidence. It is calculated that, when applied to all, the "timettou" will give a profit of 144 per cent. to the State. But in the town of Erzeroum the sum produced by the new assessment has been 7,000*l.* as against 1,700*l.*, the ancient quota. The work progresses slowly, and will take many years to accomplish, particularly as in most parts of Kourdistan it has met with dangerous opposition.

64. At Broussa a survey of real property, and a census of the population, were carried out in 1857-58, by Government engineers, for the city and neighbourhood, and the "salyané" established accordingly. Those surveyors were recalled on account of the process being considered too tedious and expensive ; and they were succeeded by a number of clerks from the Porte, who continued the cadastre throughout the district, but not in the same scientific mode. Their demarcations and valuations remain in force as a basis of taxation.

65. The Government named, in 1866, a Commission for the valuation of all the real property in Syria. This Commission, instead of making a correct estimate of the value of house property, noted on the list a sum of which 4 per mille, would yield an amount slightly in excess of the "verghi" hitherto paid. In many cases favouritism or malice was allowed to prevail. By this system the taxation has been increased, so that the "salyané" produced, in 1866-67, though the new plans were not yet perfected, 236,650*l.*, besides an extra tax "yanéi-mahsouzé", of 77,500*l.*

66. In the sandjak of Trebizonde the "verghi" had for

years past assumed the form of a house-tax, at the rate of 50 piastres per house per annum, on all houses and shops taken in the aggregate. Its collection was left to the moukhtars, and among the Christians to the ecclesiastical authorities, who partitioned it among individuals as they thought best. The Cadastre Commission has completed its labours for the town of Trebizonde, and has established there the "salyanè" from the beginning of the financial year 1867-8. It is expected to produce a much larger income than the old "verghi," of which the proceeds were in 1866-7, 23,779*l*. The valuation necessary to the levying of the "timettou" has been entrusted to a special Commission. During two years it has yet effected nothing but a few dubious estimates in the town itself and the immediate neighbourhood. Nevertheless, Mr. Consul Palgrave states that the difficulties in the way of forming a cadastre have not proved so great as was anticipated in the Report of 1861; that such difficulties, however real, have been in fact overcome for the town of Trebizonde itself and its suburbs; that they would be still more easily overcome in the lesser localities of the vilayet; that the complaints against the Commission for want of fairness seemed to him, on examination, in most cases, certainly groundless; that the publicity of the registers, strongly recommended in the Report, is neither necessary nor advisable in that part of Turkey; that the scheme suggested at page 3 by a "Conseiller du Trésor" seemed over-complicated and liable to other objections; that the cadastre well made, once for all, with decennial revisions, seemed to him much preferable for Turkey.

67. I cannot bring myself to share this view or to believe in the practicability of a genuine surveyed valuation. On this point I certainly agree with Her Majesty's Commissioners of 1861 in doubting whether the difficulties of such an operation, which have been found in France and other European countries almost insuperable, can be successfully overcome in Turkey. A vast proportion of the land is not cultivated at all, and a large proportion of what is cultivated has no selling or letting value whatever. How such land is to be valued and to be made to pay a land tax seems difficult to say. The real land tax of Turkey is the tithe. It is not intended to supersede the tithe, but only to charge titheable lands with an additional small tax of 4 per mille on the fee simple value. The

produce of this tax would be little or nothing on arable land, and its justice would be very doubtful. Property subject to tithe is already sufficiently taxed, and should not pay a land tax, even if the machinery for assessing such tax were already in existence. When that machinery has yet to be created, why incur such an enormous expense to attain a most problematical result?

68. The cadastre has proved useful in some towns, and has produced an addition to the revenue without causing excessive complaints. Still even there its results will hardly be commensurate with its cost, when applied to property so squalid and perishable as Turkish houses in general. The operation should, at all events, be restricted to the towns. The assessment and collection of the tax should there be left to the municipal bodies, to be levied and expended under Government inspection, and for municipal purposes alone. To extend the survey to agricultural land seems to me impracticable and unnecessary.

69. As the proper substitute of the tithe is a land tax, so the proper substitute of the "verghi" would be an income-tax. There may be difficulties in the application here of an English income-tax, but there are also great advantages in the same over the corresponding four great direct taxes of France, or the combined "foncière," "personnelle," and "patentes" taxes of Belgium. It is manifest that a man's annual income is the only fair basis for the direct taxation to be applied to him. The figure representing that income would, if it could be ascertained, dispense from all further investigation. In the above countries a most elaborate machinery is created for counting a man's horses, servants, doors, windows, fire-places, &c., for valuing his house and his furniture, in other words, for finding out his expenditure. But surely income is a much fairer basis of taxation.

70. The difficulties of eliciting the incomes, earnings, and profits derived from funds, annuities, banks, trades, and professions, are undoubtedly great in any country. That is, however, no reason why such incomes should escape taxation, which is virtually the case in Turkey, and partially so in the above European countries. I am ready to admit that in Turkey the question is beset with two additional difficulties. Firstly, the Government, having no trustworthy staff of employés on whom to depend, is liable

be doubly defrauded. Secondly, the exemptions accorded to foreigners would certainly stand very much in the way of a fair assessment. Still this problem should be grappled with at once. The cadastre is not the suitable mode of estimating these incomes, being only calculated to reach immoveable property. I believe that it is in the provinces extended to other incomes for a period of six years in advance, as in the case of houses; but this is a system of assessment not fairly applicable to commercial incomes. These should evidently be re-valued every year, if desired, by either of the parties interested. Incomes derived from manual labour should be exempted altogether.

71. The main problem consists in laying down a methodical system for eliciting individual profits. Investigation of private accounts and examination on oath are both equally useless, perjury being in such cases universal, and even excused in private as a necessity. All assessments must, therefore, be based on hearsay evidence, and conjecture of neighbours. Such a plan is manifestly imperfect, as each informant, being liable in his turn to be informed against, underrates his neighbour's earnings, with the view of ensuring a similar service when it comes to his own turn. The Councils charged with this assessment league themselves with the tax-payers against the Treasury. The case is altogether different when the Communal Council itself is obliged to provide a certain sum, and to allot the same, on its own responsibility, among its constituents. This system is no doubt productive of grave abuses, as reported above [paragraph 41]; but it may be greatly amended, and cannot yet, in my opinion, be dispensed with.

72. The scheme propounded by the "Conseiller du Trésor" (p. 3) seems to me perfectly suitable to the present exigencies and intelligence of the country. The main features are—(1) the imposition upon the whole empire, and apportionment among the provinces, of a certain sum annually; this to be effected by the Porte itself, with the assistance of a Council of Representatives, one from every vilayet; (2) the successive apportionment of the quota of each vilayet among the Sandjaks, and of that of each Sandjak among the kazàs, with the help of the respective ordinary and extraordinary councils; (3) an apportionment of the tax among individuals by the village authorities under certain new regulations and pre-

cautions, with appeal to the district Council, and from that to the superior authorities. The "Report further recommends the fullest publicity being given to the contents of the registers, and that each rate-payer should be called upon to make an exact statement, in writing, of the amount and value of his property." To this should be added the words, "and of his income from all other sources."

73. The "timettou" is in principle an income-tax of 2 per cent. on all incomes. To this tax no exception can be taken; but it is desirable that the basis of the same should be clearly defined as being the net income of each individual, derived from all sources in the Turkish dominions, excepting that arising from real property which has already paid tithe, or from manual labour. For greater simplicity, even at some sacrifice of accuracy, incomes should be divided into ten different classes, with a sufficient range in each to include a large class of tax-payers. It should then be left to the communal councils to assign each tax-payer to one or other of those classes. Every facility should be given for appealing to the superior authorities against the assessments thus made. The publicity of accounts and the appointment of travelling financial inspectors ought to be a sufficient protection for poorer rate-payers.

74. For the protection of the revenue, the system of apportionment will be necessary for some time to come, otherwise all parties would combine against the public treasury. The present produce of the "verghi" from all sources is set down at 2,805,525*l*. This is a sum which might be largely increased if the tax were fairly assessed and extended to Constantinople, with its population of 1,000,000. By a strange perversity this town, the special seat of all the greatest incomes, and enriched by the spoils of the provinces, is still exempt from direct taxation. Here more than in Europe the wealth of the country all gravitates to the centre, a tendency which good policy ought rather to discourage than to stimulate. It is certain that an income-tax here might well produce 200,000*l*. or 300,000*l*.

75. A "cadastre" or ordnance survey of rural property is absolutely superfluous, so long as the tithe is maintained. Experience has shown that such enterprises in Turkey are never completed and never produce any results commensurate with their cost. More simple methods are

here advisable. It is only property in and about towns that has really any saleable value. It will be wise to lay down some general rules for the taxation of such property, leaving the collection and expenditure of the tax to the communes themselves, on condition of their paying a fixed quota to the Government. The municipal institutions and habits of Turkey, by which the members of a community are more or less jointly responsible, are, and will be, of great use in collecting the tax.

76. This ancient communal organization, which offers such strong guarantees of the good conduct and solvency of all members of a community, should be preserved and amended, not abolished. But by "community" are now understood the aggregate members of one religious sect in any locality, not all the citizens of the locality. This should not be. The present confusion is great between the old law and the new. The latter itself is vague and obscure, too much based on distinctions of religion. Thus each creed in every village is to have its two "mouhtars" (maires), and its own separate council of elders, which are to apportion the taxes. The different councils of elders are to deliberate in common only on questions of "edility and agriculture which concern the general interests of the whole commune." Two or three Governments, independent of each other, co-existing in a village, seem calculated to produce discord and confusion. The rival sects in Turkey act together harmoniously enough in the upper councils of the provinces. There seems to be no sufficient reason for keeping them apart in a small village, where the elements for forming even one efficient municipal council must be difficult, if not impossible, to find.

Section IV.—*The Bédél Tax.*

77. STATEMENT of the Estimated Produce of the Bédél for the following Years in the whole Empire, and in some of the Provinces.

	1859-60.	1863-64.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.
	£	£	£	£	£	£	£	£
Whole Empire ..	476,873	545,270	549,747	..	..	572,883	580,432	580,432
Vilayet of Adrianople	77,886	..	..	..
" Danube	139,862	155,397	228,911	256,050	..	..
" Bosnia	33,710	33,710	33,710	33,710	..
" Salonica	79,326	79,326	..
Sandjak of Monastir	41,400	..	..	..
" Adrianople	..	22,939	22,839	22,826	22,826	22,826	22,826	..
" Salonica	18,911	18,911	18,911	..
" Toulieha	3,060	..	..	..
" Scutari From	2,727	..	3,600	..
" Thessaly, 2	Permanent	quota	22,500	..	..
" Epirus, 3	..	22,830	25,650	25,650	26,550	25,200	25,200	..
Vilayet of Adana..	..	3,600	3,600	3,600	3,600	3,780	2,250	..
" Aleppo	..	10,305	10,305	10,305	10,305	8,280	5,130	..
" Aidin	About	18,711	annually.	..	..
" Crete	8,704	..	..	..
" Cyprus	8,280	..	..	..
" Kourdistan	17,318	..	..	..
" Erzeroum	23,600	23,600	23,600	..
" Syria	16,083	to	19,040	..
" Trebizonde	From	..	17,379	18,000	..
Sandjak of Bigha..	1,485	..	..	..
" Rhodes	1,440	..	..	..
" Smyrna	6,233	..	..	..
" Bagdad	772	..	..	..
" 12 small Sporades	1,068	..	..	..
" Trebizonde	7,362	..	..

78. This tax passes also under the different names of "bédélié," "askérié," "haratch," "nefouz parassi," "imdadié," "djidzyé," "nizamié," and "bedelât." It is paid by the non-Mussulman subjects of the Porte, in consideration of their exemption from military service. The last official estimates of its yield give an annual sum of 580,432*l.* The tax is levied on different principles as well as under different names. In some provinces it is fixed at a certain amount, like the "verghi," and then allotted by the Government among the different creeds; in others it is collected by the Government itself from individuals after a certain fixed scale. In general it is, however, allotted beforehand on the basis of the supposed population of a district.

79. Some rough estimate of the population of some districts was made for this purpose about 1854. It was then laid down that the annual levy for the nizam should be one recruit for every 180 male adults, or $5\frac{1}{3}$ per mille, and that the "raya" population should furnish their contingent in money at the rate of 5,000 piastres (41*l.* 12*s.*), instead of one recruit. The aggregate impost on every commune is, therefore, annually fixed at a sum intended to represent a charge of $5,000 \div 180 = 27\frac{7}{10}$ piastres (5*s.* 10*d.*), for every contributor. It is then apportioned among themselves by the heads of communities on the same principle as the "verghi." It is not easy to learn what data the Government possesses for apportioning this impost among the vilayets and provinces. The Island of Crete has been always exonerated from conscription and "bédél." Bosnia has long enjoyed an immunity from the former, but has now lost this privilege from the present year.

80. The following figures taken from the returns for the military district of Trebizonde, which contains a Mohammedan population of 133,124 males, will show the incidence of the conscription during recent years:—

			1864-5.		1865-6.		1866-7.		1867-8.	
			Conscripts.	Volunteers.	Conscripts.	Volunteers.	Conscripts.	Volunteers.	Conscripts.	Volunteers.
Totals	..	..	1,088	39	1,246	51	1,206	28	1,259	20
Grand totals	..	..	1,127		1,297		1,234		1,279	

The above annual forcible levy averages 1,200 men, which, divided among the Mohammedans, would represent a proportion of 9 conscripts per 1,000 males of all ages, not $5\frac{1}{2}$ per 1,000 adult males, which is the official proportion. The price of exemption from sea service is here 90*l.*; that from land service 45*l.* In the districts of Erzeroum and Sivas the levies of men have risen as high as 14 per mille in some years.

81. Every recruit is liable to serve for five years in the Nizam and seven years more in the Redif or reserve. Conscripts for the navy serve seven years. The nominal strength of the regular army is—

Nizam—6 Corps d'Armée of	over 20,000	=	124,000
Redif—Ditto ditto	say 17,000	=	102,000

Total	236,000
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This is, however, much above the really available force. During the last Russian war the army was, according to an official report, composed as follows :—

Nizam	105,325
Redif	103,827
Local militia	7,741

Total	216,893
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In 1867 the “seraskier” issued a statement, setting down the then regular effective force exclusive of local militia, at 154,000 men, *i. e.*, 124,000 Nizam, and 30,000 Redifs. This may be considered a maximum figure. The army is kept down to the lowest standard compatible with the requirements of the service. It is increased by strengthening the battalions of one or more corps, or by calling out a certain number of Redif battalions. At the period of their institution these latter were only to be called out under exceptional circumstances; but for many years the Nizam has been found insufficient, and some Redif battalions are always under arms. Their number has varied of late years from 5,000 to 50,000. Besides the regular force there is always a large force of local militia, “zaptiés,” workmen and “bachibouzouks” or irregulars. Of these latter 70,000 were employed during the Russian war, and even in 1868 as many as 15,000 were embodied in the European Provinces, now mostly disbanded. In ordinary times there are always some 2,000 or 3,000 kept on active service.

82. The annual contingent to be furnished by the

conscription would be 25,000 men, if all the corps were kept up to their normal strength, and more regularly renewed. This, however, is not the case. The conscription is not applied equally to all the provinces. Some that appear exhausted are allowed more rest than others. Though the ballot is held every year, all the conscripts are not forced to serve. The number of those who join their corps annually may be set down at from 12,000 to 15,000. A conscript may purchase his discharge from the Nizam for a sum, to be paid into the military chest, varying from 45*l.* to 90*l.*, but is still liable to serve his seven years in the Redif.

83. The "Hatti Humayoum" of 1856 thus solemnly lays down the principles for the future recruitment of the Turkish army :—

"Art. 14. L'égalité des impôts entraînant l'égalité des charges, les sujets Chrétiens et des autres rites non-Musulmans devront, ainsi qu'il l'a été antérieurement résolu, aussi bien que les Musulmans, satisfaire aux obligations de la loi du recrutement. Le principe du remplacement ou du rachat sera admis.

"Art. 15. Il sera publié dans le plus bref délai possible une loi complète sur le mode d'admission et de service des sujets Chrétiens et d'autres rites non-Musulmans dans l'armée."

"Art. 18. Les impôts sont exigibles au même titre de tous les sujets de mon Empire, sans distinction de classe ni de culte."

84. These clear provisions of the organic law, published under the auspices of the present Grand Vizir Aali Pacha, have been hitherto entirely ignored. An explanation of their non-observance was afforded by Fuad Pacha in the following terms on 18th February, 1866. "The actual admission of non-Mussulman subjects into the Ottoman army has met with obstacles resulting almost exclusively from the repugnance felt by the same for military service. But the Government, far from having renounced the execution of this measure, which is all to the advantage of the Mussulmans, who now alone pay the 'tax of blood,' is studying a method for introducing the non-Mussulman element, either by means of voluntary engagements or by other conditions calculated to remove existing jealousies or repugnance. There exist, moreover, already in the Ottoman

army two regiments of mixed Cossacks, composed of Mussulmans and Christians."

85. How far the grounds here adduced are sufficient to justify the breach of a fundamental law, it is useless to investigate. It is quite sufficient now to recall the fact that the Porte is pledged to Europe as well as to its own subjects to carry out the above principles, by having communicated to the Powers, and recorded in the Treaty of Paris of 1856, the above Hatti Humayoum. It has again solemnly re-affirmed its liability in the above Memorandum of Fuad Pacha, the Grand Vizir in 1866. It is, therefore, now too late for the Porte to retrace its steps. The question has been argued and decided. The Mussulman population especially has a right to demand that its Government shall carry out its engagements, and relieve them from a pressure which is exhausting them. The Christians pay, indeed, a certain sum supposed to be an equivalent for military service, but obviously inadequate when it is considered that it only amounts to an average charge of 1s. 2d. per head. Were it, however, enough to represent the primary value of the exemption, it could never act as a set-off to the misery entailed on the Moham-medans by the enormous burden of the conscription. This latter is the true cause of the decrease of the Moham-medan, and increase of the Christian, population.

86. To illustrate the advantageous position in which Christians are placed by this tax, the following facts reported by Mr. Consul Stuart, will not be out of place:—The male adult Mussulman population of Epirus may be stated at 40,000. Their annual contingent to the Nizam is now fixed at 850. A conscript may be bought off for 8,000 piastres (72l.), paid into the Government chest. Hence, $850 \times 8,000$, or 6,800,000 piastres, represents the pecuniary burden of this tax; or, on an average, 170 piastres per male per annum. There remains the redif. By a new regulation conscripts to this force may procure substitutes; but as the time of service is indeterminate, depending on the exigencies of the State, instead of a sum once paid, the substitute receives a monthly allowance varying from 100 to 200 piastres—say on the average, 150 piastres, or 1,800 piastres per annum. One year with another, 650 men are annually called out for the Redif. Therefore here is a new tax of $650 \times 1,800 = 1,170,000$

piastres, or $29\frac{1}{4}$ piastres (5s. 3d.) per head. This, added to the charge for the Nizam, makes about 200 piastres as the average annual burden falling on every male adult of the Moslem population. All who can afford it buy themselves off from the Nizam, and procure substitutes for the Redif. The tax on the Christians, amounts as shown above, to an average of $27\frac{1}{10}$ piastres on every contributor, or to 1s. 2d. per head of the population.

87. The present form of conscription in Turkey is certainly the most suicidal of all their taxes, falling as it does, not on the whole population, but on one-half of it, and on that half which constitutes the mainstay of the Empire. The rich Turks and the townspeople manage to shirk this tax in whole, or in part. The capital, by an unwise and illegal privilege, is totally exempt from the conscription and "bédel." Millions of Arabs, Kurds, and other nomads laugh at this, and all other taxes. The poor Turkish peasant—loyal, laborious, uncomplaining, and unfriended—pays for everybody. To him the loss of his able-bodied sons may be absolute ruin. This is no sentimental grievance, but a crying injustice, which is gradually sapping the strength of the Empire. Everything tends to prove that the so-called dominant race is yearly dwindling away under the action of this cause.

88. The "bédel" is also objectionable as keeping up invidious distinctions between Moslems and Christians. The former naturally regard the latter with contempt, as being taught by this system to consider them unworthy of performing this noblest duty to the State. There is, certainly, no desire among those who are debarred from it to enjoy this honour. The "bédel" is, probably, the only tax which is paid with cheerful alacrity. In one province alone—Bosnia—is there reported to be any desire among the Christians to serve as soldiers. I have some difficulty in believing that this martial spirit exists among the Bosniacs or that, if it exists, it is of a nature to be trusted. I believe however, that, with proper precautions, the Bulgarians and Armenians might be safely trusted with arms, and that gradually some more mixed regiments might be formed of all races.

89. Before the "tanzimat" of 1839 the Turks were a privileged class. They cheerfully performed their military service, enjoying in return wealth, honour, and power. Rich resident landlords existed. The influence of these

rural Beys was some check on the depredations of upstart Pachas and officials. The Rayas of those days had to work hard and to pay the "haratch," which was something like an equivalent for their exemption from military service. Then Turkey was less taxed and better cultivated. The entire social and economical state has since been unhinged, and has not yet settled down on its new basis. All classes are now overtaxed, but in an unequal ratio; for as it was once the Christians it is now the Mahometans who bear the brunt of the burdens. The Albanians and other Moslem races of Europe from having been once pillars of strength to the Turkish Power, are fast failing in numbers and loyalty, being forced to see that taxation and conscription combined are gnawing away their substance and their very existence.

90. The old "haratch," though moderate in amount, was often an engine of extortion and tyranny. From the earliest period of Arab conquest this tribute had been imposed on conquered nations which refused to conform to Islam. It consisted of a capitation tax and of a tax levied on land, which was sometimes a fixed sum, according to the extent of the latter, sometimes an impost on its proceeds, varying from one-eighth to one-half. To correct former abuses a Firman of 1834 abolished the old mode of levying it, and ordained that, in future, it should be levied by a Commission composed of the Cadi, the Civil authorities then termed "Musellim" and "Voyvode," and the "Hodjâ Bachis," or Municipal Chiefs of the Rayas of each district. It was fixed at 15, 30, or 60 piastres, payable by every male adult Raya, according to his means. This produced 40,000,000 piastres. In 1850 it was again readjusted by a new edict, ordaining that in future it should be levied by the "Hodjâ Bachis" of each of the four "nations," who remit the same through their Patriarchates, or their "Khakam Bachi" (Head of the Jews) to the Imperial Treasury.

91. The anomalies attending this tax have lately come to a crisis in the affair of the Kroumlis, a small population of some 4,000 souls, inhabiting the vilayet of Trebizonde. After having professed Islam for three and-a-half centuries, these villagers, whether moved by some inward grace, or by a sagacious observation of the events of the age, now proclaim that they are orthodox Christians, and have always been so at heart. They claim the protection of Europe, and all the privileges attached to their creed,

especially that of not serving in the army. The example has naturally proved contagious. The people of Kalifa have boldly declared themselves to be Armenian Christians, and claim the temporal favours attached to that faith. The local Government has of course temporized, as long as it could, but now refuses to recognize these conversions in their civil effects, on the just ground that such a recognition would hold out a premium to apostacy and disloyalty.

92. Of the 27,000,000 souls which are estimated as the population of Turkey Proper, *i.e.*, of the provinces under the immediate Government of the Sultan, 16,000,000 may be set down as Mahometans. Of these, about 3,000,000 are nomad tribes not amenable to the conscription. Another 1,000,000 has to be deducted for the citizens of Constantinople, and of other towns who manage to evade it. This would leave about 12,000,000 to bear the whole burden of the conscription for army and navy. In pecuniary value alone, this is certainly one of the heaviest taxes of all, though paid not in money, but in flesh and blood. If the annual levy of men is computed at 15,000, and the legal price of a substitute from 50*l.* to 90*l.*, the pecuniary value of the tax may be set down at from 1,080,000*l.* to 1,350,000*l.* per annum. Adding 50,000*l.* as the annual burden of the redif, this would show the burden falling on the settled Mohammedan population to be from 1,130,000*l.* to 1,400,000*l.* The Raya population, about equal in numbers, pays 580,000*l.*, or in proportion only 41 per cent.

93. The above figures do not sufficiently represent the comparative weight of the two burdens. The Redif service is, perhaps, more onerous than the Nizam. The conscript in the latter is comparatively a young man, and his services are only lost to his father. But the Redif is generally a married man, and when called out is forced to leave his family in want, his fields untilled, or his crop unreaped. He is exposed to the dangers, diseases, &c., of camp-life, and must spend what little he has to keep body and soul together, as no care is taken of Redifs. What must his feelings be on returning home to find his oxen sold to some neighbouring Raya, who drank while the Turk marched, fought, and starved, and himself no longer a substantial farmer, but a pauper?

94. This is the monster evil which is gradually consuming the Turkish race. The flower of that race are

now lounging in the barracks, the ships, the Government offices, the ante-rooms, and the streets of the capital, owing to this impolitic system of taxation. Old men and children are left behind to till the fields and to pay the taxes, if they can. The most urgent of all measures is to repeal this iniquitous exemption from all direct taxes accorded to the capital, and thus partially to stop the drain of men from the agricultural districts. If the stability of the Empire is to be preserved, some further measures are necessary for arresting the decay of the Turkish race.

95. Two alternatives, both founded on just, though on opposite principles, now present themselves. In the first place, the Porte might redeem its pledge by purely and simply extending the present conscription to all its subjects, admitting, or rather compelling, all to serve on equal terms, thus maintaining the army at its present strength, yet relieving the Turks from a large share of the pressure. We are told that the Christians strongly object to having this proud privilege thrust upon them; but as the measure would be an act of simple justice to all, and would place them on a par with their Turkish masters, and with all continental Europe, their complaints can hardly form a sufficient objection to the measure, if it is otherwise expedient. The plan is, however, open to another serious objection, viz., that if it is doubtful whether the Christians could be made to bear arms, it is still more doubtful what they would do with their arms when they got them. Taken together, these considerations seem to be enough to make any Government hesitate before taking any wholesale measure, but should not prevent the experiment from being tried.

96. The only other apparent alternative is that of abolishing the conscription, and introducing a volunteer army. Disguise it as we may, a conscription is nothing but a modified form of serfdom or slavery. The superior value of free labour should be, and is, as apparent in military as in civil life. On this principle a volunteer army ought to be far more efficient than a conscripted army of the same numbers, or equally efficient as a conscripted army of greater numbers. The present Turkish army consists of about 120,000 men of the best possible materials, but untrained and inefficient, especially with the delicate weapons now used. A volunteer army of 80,000 seasoned

troops well picked, well paid, well officered, and making arms their profession, would be much more efficient, and need not cost much more than the raw and reluctant levies now under arms. The same principle might be judiciously applied to the navy, which, in its present state, is more wasteful and inefficient than the army. Its effective force might well be reduced from 28,000 pressed men to 20,000 volunteers, without its efficiency being impaired, by improving the discipline and quality of the force. The consequence would be the release of about 48,000 men, who would enrich the State by their industry. The additional cost of these smaller and better forces could be easily borne by the people when released from this heavy tax of military servitude. The Nizam might then be abolished, but the Redif should be retained and extended to all creeds, to act as a reserve or "landwehr" for occasional exercise in peace and for service in war. The "bédel" tax might then be abolished, and a proportionate increase might be added to the "verghi," payable by all creeds.

97. If the conscription is a well founded grievance, in some parts of Turkey it is replaced by a system infinitely worse. Thus in Turkish Arabia men are pressed into the service by forcible enlistment, on any arbitrary ground. False accusations and pretexts are trumped up to justify the seizure of individuals; bribes are offered or extorted to secure exemption. It is now intended to substitute a regular military conscription of the sedentary population of Turkish Arabia, the towns of Bagdad and Bassora being excepted. The justice of this exception is not apparent; in other respects the expediency of the change is undeniable, unless, indeed, the conscription could be everywhere abandoned. Yet so suspicious is the population, that the introduction of the conscription has been made the pretext for a sanguinary revolt.

98. The Christian population of Turkey is not thankful enough for the blessing which it enjoys in total exemption from military servitude. The other nations of Continental Europe are all groaning under this infliction. All are taxing and mortgaging themselves to the utmost power of endurance. The greater the Power the greater the proportion of male adults who are annually snatched from their callings, and robbed of the best years of their lives without remuneration. At the present rate of progress it

looks as if the next generation would all have to carry a musket for the greater part of life. Yet here, surrounded by war's alarms, lives a population of 11,000,000 which, in its happy ignorance of this scourge, may well be a subject of envy to civilized Europe. What then must be the pressure of this burden on the Turks alone, who constitute little more than 12,000,000, and who have to keep up a standing army and navy of 150,000 men! The police force and several local irregular corps are also recruited exclusively from the Mohammedan population.*

* The new law on the reorganization of the army has just appeared, though dated the 22nd of June, 1869. It divides the army into—1, the permanent army; 2, the Redif; 3, the Sedentary army. It fixes the 1st at 210,000 men, of whom 150,000 are to form the "active army," and 60,000 the reserve; the 2nd at 192,000; the 3rd to be formed of Redifs, whose time of service has expired, at 300,000. The whole force therefore on a war footing would be 702,000 men. The time of service in the permanent army is reduced from five to four years. The mode of recruitment is not altered. The project involves an annual levy of 37,500 men, and a permanent ordinary expenditure of 3,560,000*l.*, therefore an increase of 631,000*l.* beyond the present estimate. (*Vide* Budget, § 6.)

Section V.—The "Saymé" or Tax on Sheep and Goats.

99. STATEMENT of the Estimated Produce of the Saymé Tax for the following Years, in the whole Empire and in some of the Provinces, in £ Sterling.

	1859-60.	1863-64.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.
	£	£	£	£	£	£	£	£
Whole Empire ..	789,952	807,683	1,022,045	..	..	1,326,175	1,466,379	1,410,129
Vilayet of Adrinople	77,886	165,535	221,400	197,100
" Salonica	155,397	228,911	256,050	278,018	..
" Danube	140,011	139,862	3,600	3,240	15,840	25,600	..
" Bosnia
Sandjaks of { Dibra	49,500	37,600	..	..
{ Monastir
{ Uscup
Sandjak of Toultscha	3,060	..	53,100	46,800
" Adrianople	40,050	44,550	48,312	..	..
" Salonica	29,925	33,670	..	..
" Scutari	1,995	5,841	3,356	3,431	..
" Thessaly, 2	47,700	49,500	51,525	54,000	55,800	..
" Epirus, 3	41,400	46,540	45,360	45,035	45,153	45,168	..
Vilayet of Adana	7,200	9,450	10,800	13,050	14,400	13,680	..
" Aidin	about	81,000	annually.	..	..
" Aleppo	13,950	18,900	22,500	24,750	27,900	27,000	..
" Crete	8,704	..	..	..
" Cyprus	8,280	..	..	..
" Koadistan	17,318	..	..	..
" Erzeroum	23,600	23,600	23,600	..
" Syria	16,083	to	67,400	..
" Trebizonde	7,584	7,768	7,709	7,916	8,052	..	..
Sandjak of Bigha	1,485	..	..	..
" Rhodes	1,440	..	..	..
" Smyrna	6,233	..	..	..
" Bagdad	772	..	..	..
" 12 Sporades	1,068	..	..	..
" Trebizonde	3,500	3,583	3,542	3,583	3,583	..	..

100. This is a tax originally assessed on sheep and goats, but subsequently extended to swine and cattle. It comprises the various taxes or various names of "djelleb," "aghnam," "koyoum-rossoumi," "djanovar-rossoumi," "kumchour," and "tchoban." It may be considered as an equivalent imposed on pasture lands for the tithe which is payable on arable land; and was, before 1858, paid in kind at the rate of one in every ten sheep. Since then a money payment has been generally established, calculated at 10 per cent. on the average value of the sheep. All through Turkey there are large flocks of sheep intermingled with goats, which thrive unaccountably on land apparently waste, and are valuable for their milk, butter, cheese, wool, skins, tallow, and flesh. The Caramanian breed is peculiar for its horns (common to both rams and ewes), its large size, and curious fat tail. Mutton is practically the only flesh meat to be found all through the Empire. In Bulgaria the average price of butcher's meat is about 2 piastres per oke ($\frac{7}{10}d.$ per lb.); in Albania it is less by $\frac{1}{2}$ piastre.

101. The sheep-tax is fixed at different rates in different provinces, but is everywhere put up to competition, and sold to speculators. In the Adrianople vilayet a money payment is demanded of 4 piastres ($8\frac{1}{2}d.$) on every sheep and goat. In 1867, the appaltators made a profit of 1,000,000 piastres (9,000*l.*) on the purchase price of 165,535*l.* The number of sheep and goats in this "vilayet" is estimated at 4,787,000. In Bosnia the tax only exists in one "sandjak," that of Novi Bazar, where the land is chiefly pasturage. The others have hitherto been exempted on account of short crops and other burdens which have fallen heavily on them. At Cavala, Salonica, Toultscha, and Broussa, full-grown sheep and goats pay 4 piastres per head; at Monastir, only 3 piastres, full-grown pigs 10 piastres; in Epirus and Syria, sheep pay $2\frac{1}{2}$ piastres; at Trebizonde 2 piastres; at Bagdad $2\frac{1}{2}$ piastres.

102. In Epirus the tax was in 1846 only 1 piastre per head; in 1858, it was raised to $1\frac{1}{2}$ piastres; in 1860, to 2 piastres, and in 1865 to its present rate of $2\frac{1}{2}$. Sheep and goats are there about equally numerous, and, taken together, are worth on an average 20 piastres (3*s.* 5*d.*) per head; consequently, they are taxed at the rate of $12\frac{1}{2}$ per cent. In addition to the "saymé," flock-owners are subject to

another charge called "arniatika," which consists of an "oke" of butter and an "oke" of cheese for every 10 ewes or she-goats, and a lamb for every 50 sheep, annually presented, together with a contribution of fowls from the villagers to the "effendi," or lord of the manor. "This is a remnant of the old" tax called "spahilik." Being an authorized charge, it raises the legal tribute on the flocks to 3 piastres a-head, or 15 per cent. on their value. At Toultscha, lambs pay from $\frac{1}{2}$ piastre to 1 piastre each; sheep, 4 piastres; swine, 3 piastres; horned cattle, from 5 to 10 piastres. At Trebizonde, horses, mules, asses, and camels pay a duty of $2\frac{1}{2}$ piastres each on changing hands; none otherwise: horned cattle are in theory liable to the same tax as sheep, and to this effect are yearly counted by the Government; but on a declaration that they are necessary for tillage they are exempted; hence nothing is ever paid for them except in case of sale, when $2\frac{1}{2}$ piastres are exacted. At Tripoli, there is a tax of 20 or 25 piastres per head on camels.

103. The Kourid and Arab nomads generally refuse or shirk payment, though owning a large proportion of the flocks in the empire. Thus, in the vilayets of Erzeroum, Syria, Aleppo, Kourdistan, and Turkish Arabia, are vast tracts of pasture land in the occupation of nomad tribes, who own no direct allegiance except to their sheikhs, and whose wandering habits render the task of Government supervision for revenue purposes a practical nullity. In such a case as this, it is in the power of individuals to enter into compacts which the Government could not recognize without derogation of dignity. The farming of the tax may, therefore, under such circumstances be the best available mode of its collection.

104. The tax varies in these provinces from $1\frac{1}{2}$ to $2\frac{1}{2}$ piastres, according to the proximity to towns. This principle would be just were the other taxes, conscription, &c., realized equally everywhere; but as regards these tribes it is inapplicable, as they pay only half of what they owe for this tax, and nothing on account of others. The tax should, therefore, be at least 3 piastres per sheep. In mountainous districts it might be collected in autumn when the tribes descend to the plains for pasture. In Syria a large portion of the wool exported is purchased from Arab tribes who are beyond the reach of the tax-gatherer. Sheep are here taxed $2\frac{1}{2}$ piastres per head.

One-third of this tax may be calculated as paid by their wool, the remainder by their produce in lambs and butter. It would be easy to levy a tax on each fleece brought from the desert to the towns, and by giving notice to merchants three months before imposing it, to make the burden fall on Bedouin sheep-owners, by lowering the price paid to them by the merchants; thus partially equalizing the conditions of production between the nomadic and the fixed population. The price of wool bought from each is now the same, and it seems unfair that the class eluding the payment of the other taxes should enjoy an immunity in this respect also. The probable increase thereby to the revenue of Aleppo and Syria may be computed at not less than 18,000*l*.

105. From Rhodes it is complained that the multezims are accompanied by armed followers who explore the mountains and keep for themselves all the animals which are not in the sheep-fold at the time of inspection, though it often happens that the shepherds cannot, with every exertion, collect all their flock together. As usual it is not so much the amount as the vexatiousness of the tax which is complained of. Swine were here formerly exempt from duty, but since the last war they have been also taxed at rates varying from 3 to 10 piastres per head. In Epirus this animal would have altogether disappeared if the tax of 10 piastres per head imposed on them about 1859 had been maintained. Previously to that tax they were estimated at 15,000, and are now less than half that number, though the tax was reduced in 1866-7 to 3 piastres per head. This falling off is owing partly to the absence of demand for pigs in the Ionian Islands since the departure of the English garrison.

Section VI.—*Customs Duties.*

106.—ESTIMATES of the Produce of the Customs Duties for the whole Empire, and for some of the Provinces.

	1859-60.	1868-69.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.
	£	£	£	£	£	£	£	£
Whole Empire ..	1,385,438	2,250,000	1,917,000	..	..	1,970,465	1,737,682	1,775,482
Constantinople	1,018,153	..	..	..	..	..
Adrianople	45,754	..	..	..
Bosnia	67,500	..	..	..
Epirus	54,565	40,500	..
Salonica	144,000	..	..
Thessaly	27,000	..	..
Bagdad..	48,600	..	..	..
Cyprus..	10,350	..	..	..
Erzeroun	28,000	..	..	..
Kourdistan	3,181	..	..	..
Rhodes..	4,050	..	..	..
Smyrna	900,000	..	..	..
Syria	271,817	..	..	..
Trebizonde	21,600	..	..	..

107. The sums estimated above, as the produce of the Customs duties for the whole Empire, strike me as very inadequate. That of 1,775,182*l.*, derived from a population of 27,000,000, represents an average of 1*s.* 4*d.* per head. In Great Britain, the revenue derived from import duties alone, amounts to 15*s.* per head; in France, to 2*s.* 6*d.*; in Belgium, to 3*s.* 6*d.* The Turkish Tariff is certainly more moderate than those of either France or Belgium; but, on the other hand, it includes transit and export duties, which in those countries practically do not exist, and an 8 per cent. duty on all imports of every description; whereas in France and Belgium, many of the chief articles of import are exempt from duty. Moreover, the Customs revenue here includes a charge of 8 per cent. on all native produce passing from one Turkish port to another, which is certainly not a source of revenue in either of the countries above-mentioned. Considering these circumstances, it would seem that the present duties, if faithfully collected, ought to produce nearly double their present yield.

108 As there are no details or accounts published, the composition of the above estimated revenue cannot be ascertained. One fact, however, the decline of the revenue, is apparent from the official figures. This is explained by the gradual annual reduction of the export duties from 8 per cent.—their rate in 1861—to 1 per cent., which last minimum rate came into effect on the 13th of March last. There is another Customs duty called “*Ihtizab*,” amounting to $2\frac{1}{2}$ per cent. on goods entering all internal towns; but in practice this is not really collected for want of means. It is only the seaport towns provided with Customs collectors that really contribute anything to the Customs revenue. All goods entering these towns by land or sea, even eggs and poultry, pay 8 per cent. duty.

109. In this department of the revenue undeniable reforms have been accomplished during the present reign. Turkish financiers have never been influenced by the theory of “protection to native industry;” but, on the contrary, have shown perfect indifference on the matter. With laudable, or perhaps excessive, hospitality their policy, or at least their practice, seems to have been in former years to protect foreign at the expense of native industry. Thus the manufacture, the internal traffic, and the export of native goods, were hampered with duties

and with restrictions still more onerous, while the foreign import trade was favoured by a merely nominal duty. Thus Turkey has practised a kind of "free trade" long before the name was known in Europe, and subsequently acquired a reputation for her proficiency in political economy. At the same time, she very disinterestedly never claimed any reciprocity of tariffs from foreign countries.

110. The Treaties of Commerce of 1838 marked a reaction from this policy. That with Great Britain imposed a uniform duty of 3 per cent. on all imports from and exports to the United Kingdom. In addition a so-called internal duty of 9 per cent. was charged on all goods intended for export on their introduction into the port of shipment, and a corresponding duty of 2 per cent. on imported goods when sold for consumption. These "internal" duties brought up the aggregate charges to 12 per cent. on exports, and 5 per cent. on imports. The provisions of this Treaty were immediately extended to France and gradually to other countries. The 12 per cent. charge on exports, contrasted with the 5 per cent. charge on imports, will appear strange to those accustomed to European theories on the subject, but was yet an improvement on the previous *régime*.

111. The Treaties of the 29th April, 1861, with Great Britain and France mark a new stage in the commercial legislation, and form the basis of the present duties. It was therein stipulated that a single export duty of 8 per cent. should be payable on the export of Turkish produce, not to be enhanced by any internal duties on sale or removal, and to be annually reduced by 1 per cent., till it should have reached the minimum of 1 per cent., at which it was to remain stationary. This minimum rate came into operation on the 13th of March, 1869. The new Treaties raised the import duties on foreign produce from 5 per cent. to 8 per cent., which charge was to cover all internal charges or tolls, and reduced the transit duty from 3 to 1 per cent. Similar Treaties were subsequently concluded with Austria, Belgium, Denmark, Italy, the Netherlands, Prussia, Russia, Sweden, Spain, and the United States. Separate tariffs were also framed by special Commissions for the purpose of assessing specific rates of duty on the imports from and exports to the above States, which rates were to be equivalent to the 8 per cent. *ad valorem* duty.

112. Thus, the Turkish tariff, though one of the most moderate, has become one of the most complicated. Still more objectionable is its inequality. Under colour of an 8 per cent. duty for all, the specific rates have been so manipulated as to favour some countries at the expense of others and at the expense of the Turkish Treasury. Thus cloth pays duty by value when coming from Austria and by weight coming from the Zollverein. As a natural consequence, coarse Prussian cloths are sent through Austria and fine Austrian cloths through Prussia, to be shipped at Hamburgh, both thus choosing the tariff which is most advantageous to them and least advantageous to the Treasury. This can only be remedied by the adoption of a uniform tariff applicable to all countries.

113. Considering the geographical position of Turkey and the quantity of merchandize which passes through her ports, the Customs duties should yield a much larger revenue than at present. The ruinous system of farming the revenue, accompanied with loss to the Treasury, and demoralization of the mercantile community has now, thanks to the vigour and integrity of the present Director-General, Kiani Pacha, been abolished. But frauds and corruption are still undoubtedly rife in the lower branches of the Department. This is the principal difficulty with which the Government has to contend. It tends also to throw the trade into the hands of unscrupulous merchants, and fosters a spirit of hostility between the Custom-house and the merchants, by which both suffer. A simple and uniform tariff would promote the interests of both, and would discourage fraud.

114. Another great desideratum is a good system of warehousing in bond. Of this Turkey is at present destitute, so that merchants are obliged to import from hand to mouth. A good bonding system would encourage importation, and would materially aid in the just collection of the duty. The erection of docks and bonded warehouses would be readily accomplished by private enterprise, and would supply a keenly-felt want. At the present moment goods to the value of 50,000*l.* or 100,000*l.* are constantly exposed for weeks together, in lighters, to all the risks of the weather. The Government has but to choose from among a number of competitors to remedy this evil, without any cost to itself. Still, however, the question remains in suspense. As a palliative a system of declara-

tions has been brought forward by the Government, which would have enabled importers to pass their goods quickly to their own warehouses. This is a measure which the Government might well have carried through on its own authority ;* but having requested the concurrence of foreign states, and having encountered some opposition, it has allowed the matter to drop. Thus the Government abdicates its own natural duty and responsibility, and makes every measure, good or bad, to depend on the impossible unanimity of some eight or ten foreign representatives.

115. Another question suggests itself on examining the tariff. Is a uniform duty of 8 per cent. on everything the most advantageous that can be conceived ? I think not. There are many articles which elsewhere, under much higher general tariffs, are almost or quite exempt from duty, as the raw materials of industry. Such are coal, iron, lead, hides, cotton, wool, flax, hemp, zinc, &c. Turkish industry, which is almost extinct, might be perhaps revived by the admission of such articles at a lower duty. Then, on the other hand, many articles might well bear a heavier duty than 8 per cent., and would thus more than compensate for any loss on the others. Such articles are spirituous liquors, wine, coffee, sugar, and tea. On the two first an increase of duty would be but an act of justice to the native producer, who pays the tithe twice or thrice over again, as will be shown in Section 7. It is certainly true that the facility for smuggling goods into Turkey would soon frustrate any attempt to impose European duties (which often amount to 50 and 100 per cent.), upon **such** goods when imported here. But duties of 20 per cent. might well be borne and would infallibly bring in a large additional revenue.

116. The tariff with Persia is still in an anomalous condition, that Government not having subscribed to the new Commercial Treaties. Its produce is therefore charged the old Turkish rate of 4 per cent. *ad valorem* on importation, and 2 per cent. additional on changing hands, while Turkish produce is charged 12 per cent. on its export to Persia. This preferential import duty is certainly incompatible with the IVth Article of our Commercial Treaty. A preferential import of 6 per cent. instead of 8 per cent. is also accorded to imports from Austria into Bosnia, which is equally irregular.

* It has subsequently done so by a Regulation of 7th April, which is to come in force on 7th July, 1870.—H. B.

117. The régime created by Treaties and capitulations, and still more by the supineness of the Government, is highly discouraging to all native enterprise. Thus, for instance, the 8 per cent. internal Customs duty is applicable to all Turkish goods passing from place to place, unless declared for export by a foreigner. There is, however, a mitigation in favour of native manufactures made entirely of cotton, in consideration of their having already paid 8 per cent. import duty for the yarn. Such tissues are taxed 4 per cent.; those with silk stripes interwoven, 6 per cent.; and complete silk stuffs, 8 per cent. Thus the Broussa cotton manufacturer is still at a disadvantage as compared with the foreign importer, having to pay first on his yarn when imported, and an additional 4 or 6 per cent. on shipment to Constantinople. In the wide world this is probably the only country where such a system is practised. Its absurdity is made further apparent by the following example. Beyrout requires yearly a considerable supply of grain either from other Syrian ports or from Cyprus, which is only 110 miles distant. The effect of the present regulations is to give a bonus of 7 per cent. to shippers in those ports, who elect to send their grain to Europe rather than to Beyrout.

118. At one time Turkey was noted for the skill of her handicraftsmen. The varied manufactures which fully supplied the consumption of the Empire and of neighbouring countries have rapidly declined or become altogether extinct. The steel manufactories of Damascus no longer exist; the muslin looms of Scutari and Tirnova, which in 1812 numbered 2,000, are reduced to less than 200 spindles; the silk looms of Salonica, numbering from 25 to 28 in 1847, have fallen to 18; Broussa and Diarbekir, once so renowned for their velvets, satins, and silks, do not now produce a tenth part of what they yielded forty years ago. Bagdad was once the centre of very flourishing trades, especially of calico-printing, tanning and preparing leather, pottery, jewellery, &c. Aleppo was still more famous for its manufactures of gold thread, of cotton tissues, cotton and silk, silk and gold, and nankeen stuffs. These once occupied more than 40,000 looms, which are now reduced to about 5,000. While, however, the manufacturing power of the country has thus fallen off, its producing power has increased so as to render it capable of supplying Europe to an indefinite extent with bread-stuffs and certain raw materials.

Statistics of trade for the whole Empire are absolutely deficient, and those for the principal sea-ports are very imperfect. I am, however, enabled to subjoin an original tabular Statement, showing the import trade of Constantinople, derived from an official source.

119. STATEMENT of the Imports of Constantinople from Europe in 1864, reduced to their values in English money, at 111 piastres, per £ sterling :—

Articles.					£ Sterling.
Amber	..	..	..	..	26,685
Silver plate	..	..	..	..	16,587
Arms	..	..	..	..	16,083
Butter and tallow	..	..	..	..	176,625
Cattle from Russia	..	..	..	..	16,164
Jewellery and watches	..	..	..	..	75,807
Spirituous beverages	..	..	..	..	109,134
Candles	..	..	..	..	70,740
Coffee	..	..	..	..	178,623
Cinnamon and cloves	..	..	..	..	6,876
Caviare	..	..	..	..	19,296
Cereals and flour from Russia	..	..	..	..	307,026
Cochineal	..	..	..	..	19,359
Ropes and tar	..	..	..	..	15,759
Cottons and linens	..	..	..	..	2,679,462
Colours	..	..	..	..	54,990
Table glass and china	..	..	..	..	91,134
Leather	..	..	..	..	132,642
Drugs	..	..	..	..	73,629
Wool, manufactures of	..	..	..	..	762,921
Silk, ditto	..	..	..	..	353,475
Pig iron	..	..	..	..	47,664
Wrought iron, nails, machinery	..	..	..	..	105,228
Thread of gold and silver, ornaments	..	..	..	..	41,634
Furs	..	..	..	..	17,334
Coal	..	..	..	..	200,025
Oil seeds	..	..	..	..	3,699
Cheese	..	..	..	..	10,944
Olive oil	..	..	..	..	33,570
Printed books	..	..	..	..	7,614
Indigo	..	..	..	..	26,460
Musical instruments	..	..	..	..	5,823
Wool from Russia	..	..	..	..	11,565
Furniture, mirrors, &c.	..	..	..	..	58,185
Stationery	..	..	..	..	62,676
Skins, not varnished	..	..	..	..	3,699
Stones, bricks, and slabs	..	..	..	..	10,935
Boards and cabinetmaker's wood	17,424
Pepper and spices	10,143
Rice	102,843
Sulphur	19,593

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Articles.				£ Sterling.
Sugar	331,587
Articles of food, sundry	111,843
Cigars and tobacco	7,029
Tea	..	..	..	55,125
Oilcloth	..	..	..	19,800
Window-glass and bottles	..	..	..	20,664
Zinc, copper, tinned plates, and lead	..	..	..	158,634
Miscellaneous	..	..	..	621,126
Total	..	..	..	7,325,883

120. In the above Table are not included: 1. Merchandize passing to Trebizonde and Persia in transit; 2. Merchandize in transit to Russia or Roumania, which in winter is often delayed for two or three months in Constantinople; 3. Goods supplied to the Imperial palaces, to the army, the navy, foreign Legations, churches, convents, and other benevolent establishments, a liberality of the Government which is, no doubt, often abused; and 4. All the smuggling trade which is known to exist, including most of the precious stones, and much of the jewellery, gold thread, silk, and other fabrics which are imported. It is also to be observed that the above values, being based on the tariffs of 1861, are certainly inadequate as regards woven fabrics for the values of 1864. Allowing for the above circumstances, and for the known fact of a greatly increased trade since 1864, the value of the European imports may be set down at 10,000,000*l.* per annum at least.

121. To the above total of European imports are to be added many articles coming from non-European countries, such as rice, spices, dates, from Egypt; tobacco and carpets from Persia; and all the imports from Turkish ports. These latter generally pay duty at the shipping-ports. As, however, some of these ports do not possess Custom-houses, some articles pay duty here. The import duties received in Constantinople on all foreign and native goods amounted, in 1864, to the large sum of 1,018,153*l.* The above figures and facts, hitherto unpublished, will give some idea of the immense activity of this port. Of the above European import trade in 1864, 44 per cent. came from England and Belgium, 19 per cent. from France, 16 per cent. from Austria and Germany. Yet to this day

no quays or warehouses can be said to exist here. For want of these facilities, and of an efficient police of the harbour, great losses and risks occur to the trade, which are becoming unbearable. A vigorous attempt is, however, being made by the new Captain of the Port, Hobart Pasha, to remedy the latter of these evils. Here the multiplicity of jurisdictions (there are seventeen Harbour Masters of different nations) is an almost insuperable bar to improvement and order.

The pressure of public business prevents me from completing this Report at present, and obliges me to defer till next year the remaining five sections.

I have, &c.

(Signed) H. BARRON.

Netherlands.

Report by Mr. Thurlow, Second Secretary to Her Majesty's Legation at the Hague, on the International Exhibition of Domestic Economy held at Amsterdam in 1869.

Objects of the
Exhibition.

THE Exhibition which forms the subject of the present Report was promoted by, and held under the superintendence of, the Society for the Encouragement of Manufactures and Mechanical Industry in the Netherlands. The avowed object of its promoters was to bring to the knowledge of the working classes such articles of household use, furniture, clothing, food, tools, implements, and objects of information or instruction, as combine usefulness with durability, so that the working classes of all countries might be enabled to improve their condition by judicious investment of their wages. A further object which the promoters of this undertaking had at heart was—by arriving at a full knowledge of the utmost purchasing power of the daily, weekly, monthly, or yearly earnings of every class of labourer or artisan—to discover, 1st, how far such earnings are commensurate with the wants it is their duty to supply, and, 2ndly, how far such earnings, if not commensurate, can, and consequently should, be raised, without interfering with the natural laws which govern capital and labour, supply and demand, and overtaxing the rich producer for the benefit of the poor consumer. “The labourer is worthy of his hire” is the motto that the Netherlands International Exhibition of 1869 sought to uphold; and it further undertook to lay down, by tabling facts and prices, and place it in the power of all to ascertain, the hire that labour of all kinds should be entitled to command, so as to combine the possibility of health, contentment, and the attainment of intellectual enjoyments, among the working classes of society, with a reasonable profit-margin to the employer. The limits of what may be termed legitimate or judicious strikes would thus, it was hoped, be more

clearly defined, and the world at large might, perchance, be saved the pain, the evil, the waste, the crime, entailed by the future repetition of hopeless injudicious strikes, in cases where the employer of labour is unable to offer better terms, and the hands have taxed themselves by deductions from their scanty wages to do what?—to enable them to remain idle for certain weeks or months, and after being compelled to sell furniture, incur debt, and render their position more intolerable than before, to return one morning, with emaciated bodies, and heavy, discontented hearts, to the factory or mill.

Surely such an object, even if somewhat Utopian in character, must be admitted on all sides to be entitled to respect, and any contribution to human knowledge on these matters which the exhibition may have called forth, must be deemed cheap at the price, and well deserving of being scrupulously garnered as valuable material for future legislation.

That this idea should have been seized and carried out in Holland is singularly characteristic of the practical nature of her people. The neighbouring Kingdom of Belgium had become the scene of strikes on a large scale, and the Netherlands had thus witnessed from afar the good and the evil that co-operative societies have it in their power to bestow. As through a glass, darkly they had observed the “two-edged purpose” to which the funds of a Trades’ Union may be applied; how, raised for purposes of peace, they are equally applicable for purposes of war. Other countries than Belgium had suffered from misdirection of the people’s savings. In England, in France, and in Germany, abundant instances had illustrated the danger of permitting trade associations to dispose at will of the labour of a population and its hard-earned savings; and though the spirit of combination among workmen in the Netherlands remained, until 1867, so little developed as to enable Her Majesty’s Chargé d’Affaires at the Hague to report, in reply to an official circular despatch, that there was little or no information to be gained on the subject in that country: yet since that date sufficiently rapid strides have been made by the Dutch, as to afford already two examples of an imitation, on a small scale it is true, of the practice of their fellow-workmen in other countries in this regard.

These examples were the strikes in the early spring of last year, of two bodies of men connected in no way with

interest of
savings in the
association

one another; and they were for this reason important as evidences of the extent to which this dangerous remedy—a remedy almost always worse than the disease—was threatening to become one of ready resort in the Netherlands. The bodies of men referred to were the peat-cutters on the Belgian frontier, a rural population, and the skilled artizans in the Amsterdam ship-building yards—a class the exact reverse of rustic in ideas, habits, food, clothing, and all that constitutes the individuality of society. Between these country boors and town handicraftsmen no bond of sympathy could have existed. The disease with which they were infected had evidently crossed the Belgian frontier, even as the cattle-plague, or some other insidious enemy; and once it had obtained a footing in the country had, like the cattle-plague, spread rapidly from one province to another, until the taint extended through the kingdom, and was only checked from further progress by the limit of the ocean.

No time was therefore to be lost in endeavouring to trace the action of the combination wave in Holland, so as, if possible, to build up social dykes to check its force for evil. Acting on this sudden impulse the Exhibition has been held, and it has now become a duty to study its results.

Self-govern-
ment in
Holland.

In no country in the world do the local administrations and provincial legislatures watch so jealously over the prosperity of the population as in Holland; and in no country does the Government so completely realize the meaning of the phrase "paternal." This indisputable fact may probably be attributed to two causes—first, to the desire of the peace-loving, law-abiding population to be paternally governed; and secondly, to the absence of all centralization, and the power consequently intrusted to the Parliament of each county, borough, town, or village: through which system of self-government the real rulers of the people are the rulers whom they all know personally and whom they have themselves elected, the Dykegraves, the Burgomasters, and the Syndics of each district. The great interest, indeed, that England has ever taken in the Netherlands—an interest easily comprehensible in former days when Admirals de Ruyter and Van Tromp swept the mouth of the Thames with brooms at their masthead, and fully justified to-day by the fact that we annually import and export goods to and from the Netherlands to the value

of 27,500,000*l.* (or nearly one-fifteenth part of our whole foreign commerce)—is one that does not flag when opportunity occurs for penetrating below the surface, presented to the eye of every tourist. By the bulk, however, even of our well-informed and travelled countrymen Holland is simply known and judged from the brilliant writings of the American historian, Mr. Motley, or from a hurried transit, *viâ* Rotterdam, to the picture galleries and diamond-cutters of the Hague and Amsterdam. Views formed from such aspects, and opinions collected under such conditions, are not only likely to be partial and imperfect, but certain to be erroneous and misleading. The real interest of the Holland of to-day is to be found—not so much in her museums, rich as they are in works of art; not so much in the eloquent by-gones of her history, as in the inner homely life of the Dutch husbandman, in the self-government of the Kingdom as exemplified in its provincial legislatures, its communal councils, and village parliaments—in the exemplary precision, the sober and mechanical spirit, with which the Dutch regulate, as Mr. Matthew Arnold has justly observed, all the positive affairs of life; and lastly, in the provinces least known to travellers of Drenthe and Groningen, of Friesland, or of Overijssel, where the national characteristics of the people remain unchanged, and each hour's walk may place before the eye real representations of the life immortalized by Teniers and Ostade—where generations continue to succeed each other, to be born and bred and buried, inheriting and bequeathing their paternal acres under laws and usages as old as Charlemagne and as immutable as the statutes of the Medes and Persians. In these four remote provinces self-government is at home, and reigns supreme, and in the remaining seven provinces of the Netherlands, though not equally supreme in character, it still rules the people with an orderly iron sway, rendered dear to the mind of every Dutchman, by the fact that any industrious village lad may look forward to the personal exercise of it in manhood or old age. In Holland, alone perhaps in all the world, we find a perfect realization of that beau-ideal of the masses, a government “by the people, of the people, for the people.” This Government has been handed down carefully from generation to generation of liberty-loving Dutch burghers; well-to-do burghers, with more to lose than to gain from any change, and rightly jealous of infringement

of their heritable privileges : the Government and population of each district forming a perfect sample of organized self-rule for the good of all. Robbery and violence unknown—the rich secure, the poor content—one law for rich and poor alike—innumerable charitable institutions, amply endowed, for the maintenance of the sick, the aged, and the destitute—making an aggregate of peace and good-will upon earth that no other land can show such a per-centage of upon its total population.

In contemplating so smiling a social and political landscape as the Netherlands thus offer, it is well, however, to bear in mind the common-place though sage reflection, how much easier it is to rule a population of 3,000,000 than of 30,000,000 ; how much easier it is to have a model village than a model town ; and when to this is added some allowance on account of the national *vis inertia* which no doubt contributes to the easy and contented manner in which the untravelled Dutchman goes through the incidents of life, sufficient reason has been shown for the belief that the tranquillity and prosperity we admire in Holland are not attainable to the same degree at home.

Constitution of
the Kingdom
of Holland.

The Kingdom of the Netherlands is, as is known, a limited monarchy, devoted to the House of Orange and to the Constitution of 1848. Under it the States-General of the Netherlands consist of two Chambers, an Upper and a Lower. Both are elective for a term of years ; of two or four, to be determined by lot, in the case of the Commons, of nine in the case of the Upper House. There is no ecclesiastical element in either Chamber. The franchise for the Second Chamber varies under the law in rich and poor localities from 20 to 120 florins paid in direct taxation. The existing table of such rating was settled by law in July 1850, and puts the franchise at 50 florins (4*l.* 3*s.* 4*d.*) for large and wealthy constituencies, such as Rotterdam, or the Hague, and at smaller sums for others such as Utrecht, Delft, or rural districts such as Tiel. The thirty-nine members of the First Chamber are elected by the Provincial States from among those who, in taxes, contribute most largely towards the financial resources of the State ; and this element is by no means confined to the nobility. There are now eighty members of the Second Chamber ; the number varying, under the Constitution, according to the population, one member for every 45,000 souls. To provide for the maintenance of this ratio, the Table of Constituencies

is revised every five years, and the last quinquennial revision took place in April 1869. Each member receives 2,000 florins, or 166*l.* 13*s.* 4*d.* per annum, as remuneration for his services. Travelling allowances, on a moderate scale, are awarded to the members of both Chambers. Finally, no man can sit, in either House, until he has attained the ripe age of thirty.

In this last provision we find another safe-guard against the outbreak of national energy in its youth. Men do not enter the Netherlands Parliament to make a position or reputation, but rather as a consequence of having obtained some previous distinction. And when it is further known that the organization of the Dutch Government does not include Parliamentary Under-Secretaries for the several Departments of State, nor Junior Lords of the Treasury or Admiralty, the sufficiency of the causes will be more readily appreciated which combine to render the discussions in the Second Chamber of the States-General, which holds daily meetings from 11 A.M. till 4 P.M., during eight or nine months in the year, but a somnolent representation of the more agitated sittings of the British House of Commons.

Yet however satisfactory in its working in the Netherlands this exclusion of the very young from a voice in the deliberations of the country may be, and however little, owing to the habits of local self-government which prevail, and the almost entire absence of a centralizing principle, the want of trained Statesmen in the Chambers may be felt, there can be but little doubt that the causes above-mentioned have tended powerfully to the formation of a class of thought which finds expression in the dictum, "Holland is a *nation éteinte*," or, no longer in the heyday of its national existence; and it must be conceded that any cause which contributes, however remotely, to the information of such an impression, whether true or false, can hardly be accepted in an age of progress as favourable to the growth of the conditions which secure national strength, wealth and independence.

Another and more substantial source of national danger springing from this exclusion of the young from parliamentary life is the utter absence of political ambition which it has bred among the *jeunesse dorée* of the Netherlands. They mostly pass the time from leaving college to their thirtieth year in the pursuit of town and country pleasures,

and in the performance of the slender duties attaching to small sinicures at Court; to such offices as "Chambellan" or "Ecuyer." Some exceptions exist indeed to prevent the general application of this truth; some few distinguish themselves, from time to time, endeavouring to fit themselves, by travel or by study, for the more serious duties of their after-lives, on the attainment of their political majority; some few among the youth of the Netherlands upper ten thousand buckle on the sword, or take to legal or commercial business, and give evidence of their non-deterioration from the stock they spring from: but unhappily these are found in sufficient numbers only to form the exception and not the rule.

The part, however, that is played in the Government of the country by the Dutch States-General is, as has been said, but limited. They pass enactments regulating the Imperial taxation of the country, to pay the Army and the Navy, or to make main canals and railways; they ratify Conventions negotiated with foreign Powers; they determine on the policy to be pursued towards their numerous Colonies: but in no sense can it be said that they govern the Dutch people. The real seat of power at home is in the eleven local Chambers or Provincial States, which form small parliaments for the discussion of internal questions of administration, and in the eleven King's Commissaries who preside over them, and are assisted in their executive functions by permanent councils or committees, elected *inter se*, and styled Provincial States-Deputies. These regulate the communal taxation to which localities are subject for the requirements of education, drainage, roads, and sanitary objects. Their decrees are carried out by the Burgomasters of the towns and villages; and any popular display of feeling, or opposition to a cess or regulation, is handed up to the Provincial States or King's Commissary, and speedily disposed of on the merits of the thing itself, without reference to abstract principles, uniformity of legislation, or other considerations that tend to hamper justice and entail reference to higher branches of the State, with consequent agitation to enlist the sympathy or fears of other provinces or communes.

In this wise is self-government carried out in Holland; and while in the most august of free assemblies, the British House of Commons, the discussion of important national questions is constantly delayed by foolish observations upon

small local matters—for instance, bicycle-practice in Hyde Park—the Netherlands States-General are enabled to pursue unruffled and undisturbed by petty cares, their deliberations on colonial affairs and other vital issues of Imperial magnitude.

The commercial capital of this happy land, and the scene ultimately chosen for the exhibition of objects produced by every country to meet the wants of the labouring portion of their respective populations, bears the time-honoured name of Amsterdam. When the scheme for an exhibition of domestic economy was first broached in Holland, Utrecht was selected as the place best fitted for the purpose as combining most of the desired conditions. Geographically, it had great advantages. The central city of Holland, it also formed, roughly speaking, the centre of a circle drawn through London, Paris, Frankfort, and Berlin—from all of which places it was nearly equi-distant, and with all of which it was in the most direct and connected communication. By reason of its manufactures and the European reputation of its looms, it had become the most industrial of Netherland cities long before the Dutch-Rhenish Railway had given it exceptional facilities for disposing of its treasures. As the plans, however, of the projected Exhibition were more matured, and it became evident from the interest awakened in Great Britain, in France, and in the neighbouring kingdoms of Belgium and Prussia, that the European countries most advanced in civilization were sincerely anxious to co-operate in its labours and to participate in its results, it became also evident that the resources of a provincial town, however well situated and distinguished in itself, would prove unequal to the dignity and necessities of the occasion. On the other hand there existed, at but one hour's additional railway-travelling distance from the European capitals above-mentioned, the great commercial mart of Amsterdam, abounding in palatial buildings, hotel accommodation, docks and shipping, and lastly, though not least, possessed of a building capable of storing the industrial inventions of the nineteenth century, and worthy of being chosen for their display. At Utrecht model cottages must have sought a temporary canvas shelter from the inclemency of autumnal weather, while but a few leagues off there was a crystal palace on the Amstel river, with acres of accommodation under permanent glass and iron.

Site of the
Exhibition.

Furthermore, it seemed to the projectors of the Exhibition that the international character of their work would be more readily appreciated in foreign countries by the selection of a port like Amsterdam, whose harbour, nay, whose very streets, are daily decked with the flags and emblems of foreign merchandize; whose brokers' bills circulate at par throughout the world; and whose trade in useful and ornamental wares—in diamonds and in coffee—still entitles its commercial men to take high place among the merchant princes of our age.

Society for the
Encourage-
ment of Manu-
factures and
Industry.

The body to whom belongs the credit of promoting the idea of holding in Holland an International Exhibition of articles of daily household use among the working classes, is the Society for the Encouragement of Manufacturers and Mechanical Industry in the Netherlands. This useful association, established under the enlightened patronage of the King in 1851, has already had it in its power to render great services to its country, among masters and their workmen, as a judicious go-between. These opportunities have not been neglected, and its growth and practical utility cannot now be measured even by the fact that it counts many of the best names, and many of the leading men in Holland among its ranks, which number 700 strong. These 700 names do not merely represent the payment by their bearers of a small annual contribution towards defraying the expenses of the association. They represent men who, all engaged in active life, some servants of the State, others following mercantile pursuits, devote their leisure and their surplus power to the improvement of their fellow-beings.

The President of the Society, to whose untiring zeal the success of the Exhibition was entirely due, was Baron Donald Mackay, only son of Baron Mackay, who has long occupied the second place in the Kingdom of Holland as permanent Vice-President of the Council of State. The King is President of this body, but never attends its deliberations. The Prince of Orange is a simple member with one vote. The Cabinet are not *ex officio* members, but a number of permanent paid members are appointed for distinguished services in all branches of the administration. As practical President of this august body, to whose decisions the nation bows its head, and which forms the constitutional repository of the conscience of the Sovereign, Baron Mackay has wielded unseen power for good, and

contributed not a little to the welfare of his country. His son, carefully trained in the duties of a loyal citizen, and educated at the University of Leyden, embraced on entering life some ten years ago, diplomacy as a career. As Secretary to the Dutch Legation in London during the time when Baron Bentinck was so justly popular a Representative of Holland, Baron Mackay enjoyed exceptional advantages for studying our institutions both social and political. His Scotch descent, moreover, stood him in good stead in gaining access to much of London and British country life usually hermetically sealed to foreigners even of distinction. Directly descended from the Reay family, the chief of the Mackays, he met in Scotland with a hospitable reception from his fellow-clansmen in the north of Sutherland that must have contrasted somewhat strangely with the preconceived notions of his home as formed among the dykes and polders of Guelderland and South Holland. To experience so varied in the Old World, he next added experience still more varied in the New, by travel on the continent of North America. In this manner his natural gifts of observation, application, and reflexion, became heightened and improved, and gradually he acquired, to an extent but rarely equalled, the character of the international man, in which we have to do with him on the present occasion, as the prime originator and President of the movement represented by the Working Men's Exhibition of 1869.

The difficulties he encountered at the outset of his labours in reconciling the Government and the public to the scheme he had at heart, would probably have proved insurmountable to any one else in Holland, and proved, indeed, all but insurmountable to him. Not only the Conservatives looked with dread on such an innovation as taking so practical an interest in the working-man, but even the Liberals urged that his condition in Holland was so little capable of improvement as compared with that of his class in other industrial countries, as to clothe the venture with the double danger of giving rise to discontent among as yet contented men, and opening the sluice-gates of society to dread infection from the mental poison disseminated by co-operative associations of alleged benefit to mankind, but of whose power for evil as well as good the annals of late years have afforded more than ample proof.

Ultimately, however, the scheme triumphed over the

Difficulties to
be surmounted.

multitude of opposition with which it had been attempted to suppress it. In last resort its enemies had not neglected to make use of a weapon which often carries more conviction than the closest forms of reasoning. Failing alike to intimidate or convince, they had endeavoured to turn the enemy's flank by holding up the idea to public ridicule. Those, in short, who do not know how the so-called liberals of Holland are but little more than liberal in name, and are practically more conservative than our best conservatives at home, would find it hard to follow or believe the course of difficulties and stumbling-blocks which public opinion and private jealousy combined to interpose between the first conception and the fair accomplishment of the work into which Baron Mackay had entered, with the energy of a Scot and the perseverance of a Dutchman.

Co-operation
of Great
Britain:

To make amends, however, for the unpopularity he incurred at home, Baron Mackay found ample favour for his scheme abroad. In Belgium, Germany, France and England, sympathy soon kindled, and in London he shortly had the satisfaction of finding the Lord Mayor, Sir James Lawrence, calling public meetings at the Mansion-house, obtaining corporation votes of money, and presiding over a numerous and influential committee appointed to consider means for forwarding the objects of the Exhibition. A glance at the composition of this Committee will suffice to show its working character, and the guarantee that it afforded of Great Britain taking a proper place on this occasion.

Lord Mayor's
Committee.

Its members were :—

H. E. Adair, Esq., M.P.
Somerset A. Beaumont, Esq., M.P.
Michael Biddulph, Esq., M.P.
Hon. William Brodrick, M.P.
Edwin Chadwick, Esq., C.B.
Hyde Clarke, Esq., D.C.L.
Charles Critchett, Esq., B.A.
G. F. Coster, Esq.
Ellis A. Davidson, Esq.
J. Van Drunen, Esq. (Vice-Consul for the
Netherlands).
M. E. Grant Duff, Esq., M.P.
D. Everwyn, Esq. (Netherlands Legation).
Major-General Sir Vincent Eyre, C.S.I., C.B.

P. Le Neve Foster, Esq., M.A.
 J. P. Gassiot, Esq., F.R.S.
 Right Hon. Russell Gurney, M.P., P.C.
 Hon. Auberon Herbert.
 Robert Hudson, Esq., F.R.S.
 Thomas Hughes, Esq., M.P.
 Edmund Johnson, Esq.
 George J. Shaw Lefevre, Esq., M.P.
 Sir John Lubbock, Bart., F.R.S.
 J. W. May, Esq., Consul-General for the Netherlands.
 Samuel Morley, Esq., M.P.
 H. W. Peek, Esq., M.P.
 Hodgson Pratt, Esq.
 Samuel Redgrave, Esq.
 Charles Reed, Esq., M.P.
 Rev. W. Rogers, M.A.
 Gilbert Sanders, Esq.
 Seymour Teulon, Esq.
 Thomas Twining, Esq.
 George O. Trevelyan, Esq., M.P.

Mr. P. L. Simmonds, who has been connected, more or less, with almost every International Exhibition since the first execution of the Prince Consort's great idea in 1851, was appointed Secretary and Manager to this Committee, and the enterprising establishment of Messrs. J. M. Johnson and Sons of 3, Castle Street, Holborn, who published, at a large money loss, the English edition of the complete Official Catalogue of the Paris Exhibition of 1867, and who have played no insignificant rôle in both previous and subsequent undertakings of the kind, placed offices at the disposal of the Exhibition, for the conduct of all business and correspondence. From these offices speedily issued the following circular, to the leading exhibiting houses of Great Britain; and the manner in which many public-spirited firms responded to the invitation, was such as to leave no room for doubt of the success of the venture, so far as Great Britain was concerned.

Circular to Exhibitors.

"Sir,

"As we believe your manufactures to be specially calculated to attract attention at the Netherlands Exhi-

Circular to
exhibiting
houses.

bition, we have pleasure in inclosing a detailed prospectus.

"The Exhibition is to be held at Amsterdam, from July to October next.

"Exhibiting will be attended with scarcely any trouble or expense. Medals and other awards will be liberally distributed.

"The import duties are low (scarcely any exceeding 5 per cent.), and there exists in Holland a strong disposition for increased commerce with Great Britain, so that beneficial results may be anticipated from the Exhibition.

"The space reserved for the United Kingdom being limited, and the allotments having to be made at an early date, it is important that all applications should be forwarded without delay.

"Yours, &c.,

(Signed) "J. M. JOHNSON AND SONS."

The interest that many of the twelve Members of Parliament on the Lord Mayor's Committee took in the project, now fairly launched, was not confined to the lending of their names. More than one among them consulted his constituents, different Chambers of Commerce, and other associations of all kinds, consulted everything, in short, except his own convenience, on the measures to be taken to procure the co-operation of the manufacturing and industrial centres of the country. For this purpose local and subordinate Committees were formed at Edinburgh and Leith, Glasgow, Manchester, and Newcastle-on-Tyne; and the extent to which they ultimately succeeded in their endeavours will be best seen hereafter. These local Committees were composed as follows:—

Local Committees.

Edinburgh and Leith.

The Right Hon. the Lord Provost of Edinburgh.

The Hon. the Provost of Leith.

Josiah Livingston, Esq., Chairman of the Chamber of Commerce.

Professor Archer, Edinburgh Museum of Science and Art.

Donald R. Macgregor, Esq., Edinburgh.

George Harrison, Esq., Edinburgh.

Walter Berry, Esq.
 J. J. Mackay, Esq., Edinburgh.
 R. W. Thomson, Esq., Edinburgh.
 Mungo C. Gibson, Esq. Leith.
 David Maclaren, Esq., Edinburgh.
 George V. Turnbull, Esq., Consul for the Netherlands, Leith.

Glasgow Committee.

Hon. Sir James Lumsden, Lord Provost,
 President.
 William McEwan, Esq., Lord Dean of Guild.
 John Ramsay, Esq., President of Chamber of
 Commerce.
 Edward Caird, Esq., M.A.
 Jacques von Raalte, Esq., Vice-Consul for the
 Netherlands.

Manchester Committee.

The Mayor of Manchester, President.
 H. S. Shaw, Esq., Vice-President.
 J. W. Mouliere, Esq.
 S. A. Steinthal, Esq.
 John Watts, Esq.
 Dr. Isaac Watts, Secretary.

Newcastle-on-Tyne Committee.

William J. M. Lange, Esq.
 Anthony M. M. de Charente, Esq.
 John Sowerby, Esq.
 John T. Dobson, Esq.
 D. D. Main, Esq.
 Joseph Cowen, Esq., jun.

Similar Committees gradually formed in other countries, and by them a general knowledge of the special objects of the Exhibition and of the manner in which it was intended to promote them, became disseminated throughout the greater part of Europe. The 15th of May was fixed as the latest date on which applications for space to exhibit could be made to the London secretary, and the 1st of July as the latest date on which goods intended for exhibition

General
 arrangements.

would be received in the building. The opening was fixed for the 15th of the last-named month. The two first of these three dates were departed from, in accordance with the precedents established in previous Exhibitions; it proving practically impossible to procure a complete collection of exhibitors from all the corners of the earth by the day originally determined. The third date, however, underwent no subsequent change from the moment of its being published.

Central Com
mittees,

The Central Committee at The Hague, charged with the general arrangements and the task of corresponding with the various foreign and local Committees, was composed as follows :—

Baron D. J. Mackay, President.
Mr. M. L. Hermans, Vice-President.
Dr. J. Th. Monton, Secretary.
Mr. H. L. Enthoven, Treasurer.
Mr. F. W. Van der Putten.
Mr. W. J. Van Zeggelen.
Mr. J. Wijdoogen.
Mr. H. W. Veth.
Mr. J. Van der Wall Bake.
M. A. Van Naamen Van Eemnes.

And the organizing machinery was ultimately completed by the appointment of the following gentlemen to form a Board of Installation at Amsterdam itself :—

Mr. W. Van der Vliet, President.
Mr. J. Gosschalk, Secretary.
Mr. G. A. Heineken, Treasurer.
Mr. Charles Boissevain.
Mr. R. W. J. C. Van der Wall Bake.
Mr. J. J. F. Verdonck.

Thus encouraged from without, the Exhibition ultimately began to find favour in the eyes of the Dutch themselves; and many who had been loudest in their denunciations became numbered among its zealous advocates. Some pretended its character had undergone a change; that a certain revolutionary element had been eliminated, or absorbed and rendered harmless, by contact with Conservative corporations, such as that of the City of London; others, finding the scheme growing daily in popularity, suddenly became anxious not to appear to their

fellow-burghers behind the spirit of the age ; while not a few of the courtier class, a class numerous at home, but still more numerous abroad, were easily converted to the merits of an undertaking which had found means to recommend itself to the favour of the kingly, historical, and enlightened House of Orange.

Prompted in part by one or other of the foregoing motives, and also in part no doubt by a generous desire to lend a helping hand to an experiment admitted on all sides to be disinterested, and therefore noble, the Government of the Netherlands had come forward with suggestions and liberal offers of assistance. A Ministerial resolution had appeared in the official "Gazette" of the 10th November, 1868, making known that no import duties would be levied on articles destined for exhibition ; and a convincing proof of the well-wishing of the Court and Cabinet was afforded by the fact of the promoters being authorized to announce the Exhibition as held under the patronage of His Majesty the King, of the Government, and of the municipal authorities of Amsterdam.

At the outset of the undertaking, when the limited resources and accommodation of Utrecht were in the thoughts of its chief promoters, it had been notified that articles of luxury and the fine arts, with those of elegance and ornament strictly so-called, would not be admitted. From this resolution, however, it became, and perhaps happily, possible to depart in practice (without virtually rescinding the rule), for when Amsterdam was selected as the site, a building unnecessarily large for the immediate objects in view had to be filled ; it became then desirable to accept rather than reject articles of a doubtful character as judged from a purely utilitarian point of view ; and this circumstance proved a golden bridge for the Committee of Installation, in relieving them from the arduous, thankless, and well-nigh impossible task of drawing a hard and fast line between the ornamental and the useful—between articles of luxury and necessity.

Thus things settled into shape, and many matters of detail which might have proved difficult of decision ultimately solved themselves by mutual concession. Still some problems not unnaturally, however unfortunately, withstood the adjusting influences of time and circumstance. Foremost among these ranked the earnest request to exhibitors to attach the wholesale as well as the retail

Wholesale and
retail question.

prices to their goods. If this system could have been universally followed out, the beginning of the end might have been foreseen to the robbery now practised on the poorest classes of society, who are of necessity compelled to deal with very small retailers for articles of daily use. A person who buys a ton of coal or a chest of tea at a fashionable establishment gets, in reality, a nearer approach to the value of his money than the poor man's wife, who, unable to leave her home and children, is compelled to purchase her household stores by the ounce from the squalid and too often dishonest vendor of inferior goods at short weight who lives just round the corner. Ignorance of wholesale prices, and the absence of all possible check upon the profits made by small retailers, is at once the deadliest enemy of the poor, and the one most difficult to cope with. How far the great point of making these things known, and seeking a remedy by publicity, was ultimately carried, will be shown at a later place in this Report.

Further regulations.

To insure the *bond fide* nature of exhibits, the Central Committee deemed it their duty to reserve the right of purchasing all goods exhibited at the prices affixed, and of ordering like goods at the same price. Exhibitors refusing to comply with this regulation were very properly not to be held entitled to compete for awards.

The above brief and practical Regulations, with the exclusion of live animals and articles of a very perishable nature, or liable to spontaneous combustion, were the only restrictions placed on the exhibition of all the animal, vegetable, or mineral productions, and all the wares and manufactures of every competing country; and it was duly notified to the public, by Royal Decree promulgated in the Government Gazette, that medals and certificates of honourable mention would be awarded, for cheapness and general excellence, to the most deserving exhibitors, by an International Jury, nominated by the King of the Netherlands.

Under this short and simply-worded document the Exhibition changed its character. From a merely private undertaking, ostensibly promoted by the Society for the Encouragement of Manufactures and Mechanical Industry in the Netherlands, it became one to the success of which the King and Cabinet stood pledged. The sole responsibility was lifted from the shoulders of one man, and that

man himself was transformed from a volunteer, and self-appointed custodian of the interests of the masses, into an agent responsible to the King and to his Minister in the Home Department for the performance of duties originally self-imposed. From this point of view the Decree above-mentioned forms an important archive in the records of the Exhibition; and as it will, moreover, be necessary to refer it hereafter, no apology is needed for inserting the translation which now follows:—

“We, William III, by the Grace of God, King of the Netherlands, Prince of Orange-Nassau, Grand Duke of Luxembourg, &c., &c., &c. Royal Decree appointing the Jury.

“On the recommendation of our Minister for the Home Department, dated the 6th July, 1869;

“Have approved and do decree:

“1. To name as members of the Jury for deciding awards at the International Exhibition of objects for the household and domestic use of the working-classes, to be held at Amsterdam:

“As Honorary President, Mr. C. J. A. den Tex, Burgomaster of Amsterdam;

“As Member and President, Baron D. J. Mackay, President of the Society for the Encouragement of Manufactures and Mechanical Industry at the Hague.

“As Members:—

“MM. d'Andrimont of Liege; G. Berger, Paris; Van Camp, Antwerp; Carcenac, Paris; J. Clerfeyt, Brussels; C. N. David, Copenhagen; A. Deiglmayer, Vienna; L. Donnat, Paris; A. H. Eigeman, Leyden; Gilka, Berlin; A. Givard, Paris; L. J. Gron, Copenhagen; D. Grothe, Delft; H. Grothe, Berlin; Dr. J. W. Gunning, Amsterdam, also 1st Secretary; MM. M. L. Herman, The Hague; B. Jensen, Copenhagen; E. Johnson, London; J. J. Kreenen, Zwolle; J. P. Krusemen, Amsterdam; F. Von Liebig, Reichenberg, Bohemia; J. Martelet, Paris; Mondron, Lodelinsart, Belgium; Dr. J. Th. Monton, the Hague; MM. P. N. Muller, Amsterdam; P. Le Neve Foster, London; Dr. A. Van Oven, Dort, also 2nd Secretary; MM. Poncelet, Brussels; H. Pratt, London; Raeymackers, Antwerp; Renier, Brussels, C. V. Rimestadt, Copenhagen; Dr. W. Reve, Amsterdam; M. Ch. Robert, Paris; Dr. Rosenthal, Berlin; MM. G. Sanders, London;

P. L. Simmonds, London ; J. Stakrosch, Brunn, Moravia ; Stobwasser, Berlin ; P. Fétar van Elven, Delft ; N. Fetterode, Amsterdam ; Hon. T. Hovell Thurlow, the Hague ; MM. H. W. Veth, Dort ; Dr. H. Vogelsang, Delft ; M. J. Van der Wall Bake, Utrecht ; Baron de Watteville, Paris ; MM. von Wertheim, Vienna ; Wolff, Berlin.

“As ‘Jurés suppléants’ (or substitutes) :—

“MM. J. Braet Van Neberfeldt, of Amsterdam ; J. J. Buddingh, Arnheim ; A. Chapon, Paris ; E. Cheysson, Paris ; Dr. S. S. Coronel, Leeuwarden ; MM. Corr Van der Maeren, Brussels ; Danbresse, La Louvière, Belgium ; A. Dumaresq, Paris ; Duvelloy, Paris ; Gillon, Brussels ; W. T. Grasveld, Utrecht ; G. Halphen, Paris ; O. Van Kerckhove, Antwerp ; Kindt, Brussels ; A. Michiels, Antwerp ; Moullot, Paris ; Offermann, Brussels ; A. Schilte, Ysselstein ; P. Smit Van Gelder, Amsterdam ; A. P. Van Stolk, Rotterdam ; and Feston, Paris.

“2. To empower the Central Direction of the Society for the Encouragement of Manufactures and Mechanical Industry—

“(a.) To appoint ‘Jurés Suppléants’ on the application of the members of the Jury from Great Britain, North Germany, Austria, Hungary, and Denmark.

“(b.) Whenever the number of exhibitors from any one country exceeds thirty, to appoint, on the application of the Commissioners of such country, not more than seven members of the jury, and an equal number of ‘Jurés Suppléants.’

Our Minister of the Home Department is charged with the execution of this Decree.

“*The Loo*, July 8, 1869.

“(Signed) WILLIAM.

“The Minister of the Home Department:

“(Signed) FOCK.”

Classification
of exhibits.

The next point which calls for some remark is the method of classifying exhibits ultimately adopted. Simplicity was the object which the Central Committee sought especially to attain, and bearing in mind the utilitarian aims of the Exhibition, the seven classes under which articles were eventually ranged formed a marked contrast to the more complex classification of previous occasions, and perfectly sufficed to answer all the requirements of reference and order. They were as follows :—

Class I.—*Houses, &c.*

Dwellings, &c.; institutions for the use of working-men; plans of dwellings for married and unmarried working-men and agricultural labourers; plans of bedrooms, kitchens, boarding-houses, washing and reading rooms, and places of amusement; portions of these buildings; model dwellings; materials for buildings; experiments with cheap materials, mortar, iron, concrete, &c.; felt and other coverings for roofs; foundations; means to prevent damp, &c.

Class II.—*Furniture and Household Necessaries.*

Chairs, tables, cupboards, lamps, safety-lamps, stoves, ovens, washing and drying machines, table utensils (spoons, forks, knives), carpets, floor-cloths, paper-hangings, oil paints, lacquer work, framed engravings, &c.; clocks, looking-glasses, mats, iron bedsteads, cradles, clothes-horses (for linen), pails, tubs and barrels, bedding, and table-linen, feathers, mattresses filled with various seaweeds and fibres, hammocks, and cheap curtains; plates and dishes, glass and earthenware for use as well as ornament, ornamental plaster figures, cans, basins, pots, and pans; materials for warming: turf, charcoal, compressed turf, coal, coke, comparisons of heating powers; materials for lighting: oil, petroleum (samples of not more than 1 litre = 1 $\frac{3}{4}$ pints English), gas, comparisons of methods of lighting; materials for promoting cleanliness of persons and houses: cheap soaps, bleaching methods (with popular directions for use), such as bleaching-water, soda, chloride of lime, scouring utensils, powders and polishes, whiting, disinfectants, traps, and means of destroying vermin; pedlars' wares: small basket-work, tin-work, combs, brushes and brooms, mops, service-pipes, glazed iron-work, copper-work, &c.

Class III.—*Clothing.*

Cotton stuffs (including cambrics), linen, woollen, and mixed stuffs, all in the piece; ready made clothing: knitted, netted, and crochet goods, including over and under garments, waterproof clothing, working dresses for dyke-makers, pilots, fishermen, &c., leather aprons, gloves, thumbstalls; coverings for the head: caps, hats (sou'westers), women's caps and bonnets, straw and glazed hats, paper caps; boots and shoes of wood, leather, felt, straw,

gutta-percha, wool; smaller objects connected with clothing: ornaments, buttons, threads, ribbons, needles, pins, tobacco-boxes, pocket-books, purses, scissors, rings, earrings, bracelets, and other cheap trinkets, national costumes, also those of the Colonies, &c.

Class IV.—*Food.*

Agricultural and Industrial productions for food and similar uses; various sorts of flour, oatmeal, peas, beans, rice, potatoes, chestnuts, maize-flour, rice-flour, potato-flour, spices, sugar, treacle, sweet oils, vinegar, and other condiments, coffee, tea, chicory, and all sorts of sweets and confectionery, if pure and harmless; tobacco for smoking and chewing, snuff; dried food or food preserved in any way, dried and salted meat and fish, extract of meat, milk powder, preserved vegetables, jams, and fruits, &c.; drinks; beer, spirits, wines, &c.

Class V.—*Mechanics', Farm Labourers', Gardeners', and other Tools and Implements.*

Tools for working-men, by which is principally meant tools which economize time and labour in any trade, or in domestic arrangements. Tools for gardeners, farm-labourers, dyke-workers, market-gardeners, nets and tackle for fishermen, sowing-machines, ploughs, &c. (with the exception of large, and therefore expensive, agricultural implements), wheelbarrows, implements used in draining, sewing-machines, &c.

Class VI.—*Means for Moral, Intellectual, and Physical Development.*

Education and recreation. Books for the technical education of the working-classes; works of imagination (popular romances), works for education, popular science. history and biography; prints and engravings coming under the above heads. Gymnastic exercises, methods of defence; music and musical instruments, national airs, singing methods. Games, popular amusements, children's toys. Papers on the above. Secondary trades; things to be done in spare time—employments suited for women and girls at home, &c.

Class VII.—*Reports, Statutes, Rules, and Regulations of Associations for Promoting the Well-being of the Working Classes.*

Papers on institutions and associations for promoting the well-being of the working-man :—(a), to his advantage ; (b), concerning provident funds and societies, savings' banks, co-operative stores, co-operative labour, sick funds, pension funds, &c.

Articles exhibited under this class became the property of the Society for the Encouragement of Manufactures and Mechanical Industry in the Netherlands.

The building in which all these articles were to be displayed, partakes largely of the Crystal Palace style of architecture, but is stronger in its construction, and more permanent in its character than most of the buildings designed for exhibitions. Though late in maturing their International Exhibition, the Dutch were first in the field in planning an imitation of the Prince Consort's building of 1851. In the succeeding year, Dr. Sarphati commenced an agitation to collect subscriptions for this purpose, and in 1856 the foundations were laid of the "Volksvlijt Paleis," which was opened by the King in 1864. Though constructed of the usual exhibition materials,—wood, iron, and glass, it has a substantial, Dutch appearance, combined with much grace and symmetry. M. Cornelius Outhoorn, the architect, has reaped great credit in Holland from the design, and good foreign judges have not hesitated to award to it the palm in architectural beauty over the similar structures erected at Paris, Dublin, or Sydenham. It consists of one principal nave, supported by very slender cast-iron columns, which give it an appearance of lightness ; but its moderate height, and the side halls, which, though joined to and opening out of it, are partitioned off by solid walls, take off the look of scaffolding that has marred the perfection of other exhibition buildings. In the centre of the nave a dome rises to the height of 250 feet, crowned by a winged figure, of fine dimensions, which, from a little distance, stands out in bold relief against the sky. The position is well chosen, on the banks of the Amstel River, in the new part of the town, near the Utrecht Railway Station, and a small surrounding park contains Café Restaurants, and other places of out-door amusement or repose. Hitherto it has been mainly used for holding

Exhibition building. ¹

flower-shows, concerts, and popular gatherings of all kinds, and has not proved by any means as profitable an investment as had been hoped by its projectors.

Arrangement
of exhibits.

Being intended, as has been said, to remain an ornamental and useful public edifice, no special internal arrangements mark its aptitude for sub-division into nations, sections, or compartments. This, however, has not proved by any means an unmixed evil. In the International Exhibition held at Paris in 1867, a theory of arrangement was designed, perfect at first sight, but generally admitted to have proved highly inconvenient in practice. The fallacy of the arrangement of exhibits in zones lies, as Mr. Cole has clearly put it, in the assumption that every country will supply an equal proportion of objects in each group: whereas, when the stern facts are dealt with, in the actual arrangement of the interior, discordant violations of principle become necessary on all sides. In all exhibitions preceding that held at Paris in 1867, there was a tolerable certainty that objects of the same class would be found in one spot. At Paris it was otherwise: for in many cases the section of the zone where objects belonging to the same group were theoretically supposed to be collected, did not afford sufficient space for them. According to Mr. Cole, this generally proved the case in the small section of zones set apart for the exhibits of small countries. Once out of their appointed zones, no clue existed for discovering their arbitrary position. The object sought might be found in any of the other zones, or outside the main building altogether.

In the Amsterdam Exhibition, difficulties having their origin in too studied an adaptation of the building to the end in view did not arise. The simple plan was therefore adopted of cutting off for each country as much space as was required, the partitions between the several countries being generally constructed by the cases of their respective exhibits being placed back to back, and the internal arrangement in classes by each country within its own prescribed limits being entirely left to the discretion of its own officials. Thus the British section was laid out and arranged by Mr. P. L. Simmonds, the Secretary and Manager of the Lord Mayor's Committee, whose ripe experience in exhibition management enabled him to render the utmost justice to the merits of the articles displayed.

The relative proportion of exhibits from each country represented, may be seen by a glance at the following Table, showing the number of exhibitors by classes and countries :—

Numerical roll
of exhibits.

	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.	Class VII.	Total.
Austria	15	24	69	25	13	6	4	146
Baden ... ..	...	3	...	...	1	...	...	4
Bavaria	1	5	4	...	3	1	...	14
Belgium	74	93	98	44	85	46	32	428
Denmark	14	13	12	11	5	6	2	63
France	28	100	88	50	66	60	33	415
Great Britain	18	74	48	27	28	10	13	218
Hesse-Darmstadt ... ..	...	...	...	...	...	1	...	1
Italy ... ..	...	1	...	2	...	...	...	3
Netherlands	84	241	100	115	157	113	36	846
North Germany	28	23	33	16	19	6	12	134
Norway ... ..	...	...	1	...	...	1	...	2
Sweden	1	7	3	1	...	1	1	14
Switzerland	1	...	2	1	...	2	...	6
Wurttemberg ... ..	...	2	2	1	2	3	170	180
Total	264	585	419	292	319	256	303	2,498

From this Table it is seen that Great Britain ranked fourth in numerical importance of exhibitors, and it may be added that the articles in this section certainly equalled, if not exceeded, in practical utility and in money value those of any other country. The three countries that ultimately surpassed Great Britain in number of exhibitors were the Netherlands, who were at home, the limitrophe Kingdom of Belgium, and Imperial France. Yet on the opening day, the 15th July, Great Britain stood first amid foreign nations in the completeness of her arrangements. The French department, at noon on the 14th July, was represented by a large empty space of the floor of the building, roped off and labelled "France." At sundown, however, the French *personnel* and *matériel* arrived in force, speedily took possession of their appointed space, and worked with so great energy throughout the night, that when the opening hour arrived on the morning of the 15th, France, no longer conspicuous by her absence, was represented by lanes of handsome, though as yet empty, cases, and by a voluble and intelligent Frank, who was busily engaged in entering "abonnements" to a "Moniteur de l'Exposition, to be published weekly in the French department.

It had been hoped, and at one time there had appeared reasonable grounds for hoping, that the King of the Netherlands would open the Exhibition in person, or commission the heir apparent, the Prince of Orange, to open it in His Majesty's name. To the grievous disappointment of those concerned in its success, circumstances prevented

Opening of the
Exhibition.

the full accomplishment of this desire, Yet, though the King was unable to attend in person, and though illness prevented the Prince of Orange from performing the duties that devolved upon him, sufficient proof was afforded of the interest taken by the House of Orange Nassau in the undertaking by the appointment of Prince Henry of the Netherlands to open the Exhibition in the name of his Royal brother. This ceremony took place at noon of the 15th July, 1869, amidst all the honours that the civic authorities of Amsterdam had in their power to heap on the occasion. Punctually at the hour appointed, the Prince arrived in the uniform of a Dutch Admiral, and after his formal reception by the burgomaster of Amsterdam, by the King's Cabinet, and by the members of the Diplomatic Body who had come from the Hague to be present at the opening, Baron Mackay delivered an address in the Dutch language, of which the following is a faithful translation :—

Address to
Prince Henry.

“ Your Royal Highness,

“ In the Netherlands every great thing is brought about under the influence and protection of a Prince of the House of Orange.

“ His Majesty the King, the Patron of the Society for the Encouragement of Manufactures and Mechanical Industry has, during His Majesty's reign, given many evidences of his devotion to the Industry of the Netherlands. We know that His Majesty looks down with satisfaction on each attempt to develop industry, and place it in a position to accomplish its difficult mission. In the name of the Society, I have the honour here openly to express to our honoured King, my thanks for this new proof of favour, and for many previous ones conferred upon this Exhibition, by inviting your Royal Highness to open it in His Majesty's name. Your Royal Highness, whose high calling unites the maintenance of the ancient glory of the Netherlands on the high seas with the guardianship of our flag, wherever it waves in the four quarters of the earth, has, by your presence here this day, placed a seal on this work of peace, in the successful accomplishment of which our national honour is concerned. Your Royal Highness has been willing to bestow an approving glance upon a Dutch enterprise, conceived and executed in a genuine Dutch spirit ; and your Royal Highness must

graciously except the humble expression of our warm gratitude. On our soil it has ever been customary to say little and do much. This Exhibition is the fruit of calm and ripe deliberation, joined to the restless exertion of many various forces. We desire no vain show, but solid and permanent results, such as accord with the character of our people. The idea of the Exhibition was conceived by a prominent Dutch manufacturer, the President of the blooming Utrecht branch of our Society, Her John Van der Wall Bake. With a practical eye he recognized that this Exhibition would supply a want of the present day. How just was his view at once appeared from the manner in which his idea was received. Our Society unanimously resolved in one of its general meetings to proceed to its immediate execution, and our Central Committee commenced, not without fear, its difficult task.

"Abroad and at home, men of all shades of opinion vied with one another in preparing what is this day completed. Manufacturers, the learned, Statesmen, bound themselves to the work with great sacrifice of time and money. With what success their efforts have been crowned can only appear when the judges commissioned by His Majesty to deliver sentence shall have fulfilled their arduous duties. One feeling alone shall govern me on entering the Exhibition; a feeling of gratitude towards so many who have given their support to it. The number of those to whom we are indebted is indeed too great to enable me to mention them here individually; and even were I so to do, I might, perhaps, unwillingly be guilty of omissions. I cannot, however, pass over in silence the proofs of interest in the undertaking given by several Foreign Governments in the appointment of Commissioners, by His Majesty's Government, whose co-operation was never refused to us from the commencement, by Provincial and Local Authorities, by Foreign Commissioners, and by the Netherlands Provincial and Local Commissioners who, by their exertions, knew how to spur on so large a number of Exhibitors to take part in our endeavours.

"The Local Committee of Management in the capital, composed of members of the Amsterdam branch of our society, has, under the excellent presidency of Mr. W. Van der Vleit, and of its clever technical secretary, the architect, J. Gosschalk, proved, by its restless zeal and disinterested devotion, that nothing was too much for it.

“ I spoke above of the end in view, and that gives me occasion for saying a few words. Although it was a delicate task that we had undertaken, the organizing Committee was of opinion that it should be looked straight in the face, in a national manner. This has ever been the praiseworthy habit of all well-meaning Netherlands, and we desired not to depart from it. Our end is material and moral.

“ The material side of the Exhibition is evident to the eye; it gives to our manufacturers the opportunity of acquainting themselves with what is taking place in other countries in the realms of industry; it also affords to foreign industry opportunities of acquiring a more exact knowledge of our wants; it thus creates new sources for our trade; it increases our prosperity; it causes justice to be rendered to our excellent system of free trade; it promotes cheapness, and is in this respect entirely different from other exhibitions.

“ But the material side is not the principal end, which is the moral one; the power of the Netherlands nation has at all times consisted mainly in the fact that all inhabitants, to whatever class they may belong, meet one another with kindly confidence. This tie we wish to strengthen, in the conviction that nothing can be more fatal to the prosperity of the Netherlands than the absence of this first condition of welfare. As the result of pernicious influences, the workman had gathered an impression that his interests were separate from those of the work-giver. Yes, that they even were in conflict with them. No sensible workman will allow himself to be thus deluded; no sensible work-giver will make himself uneasy about it. Sad facts are there to prove that nobody experiences more the evils of this strife between unequal powers than the workman himself. The question is whether he shall profit from the experience gained by others, or whether he shall plunge himself into ruin by resort to fallacious principles.

“ This Exhibition, projected by the workman's real friends, is a protest against the misleading of those who display before his eyes glittering illusions, the unattainability of which can only produce the bitterest disappointment.

“ If this Exhibition closes the way to unlawful expectations of impossible raising of wages by means of fatal strikes, it also justifies reasonable hopes of bettering the condition of the workman without injuring his interests;

its aim is to give him the means of turning to the best account the money he earns by intelligent and orderly labour, and enable him to supply, in the best manner, all his material as well as moral wants.

"The Exhibition that your Royal Highness is about to open is thus a work of equity and mercy; of equity, because it strives to establish our social condition on firm foundations, and to render vain the designs of those who threaten it; of mercy, because it occupies itself with the condition of those whose inferior development often renders them a prey to specious but really erroneous and dangerous teachings, and hinders them from making the most judicious use of their earnings and savings.

"What I have had the honour of stating is not a rash conviction, it is the experience of the lives of men who are friends of both Dutch and foreign industry, and who know that even as in a household or family the prosperity of one member conduces to the prosperity of the others, so also in the workshop the prosperity of the workman and that of the workgiver are inseparable. This Exhibition marches on the smooth path of right and justice; it does more; its international character brings with it the presence of foreigners. The intelligent foreigner will avail himself of this opportunity to make himself master of the secret of our prosperity. The sight of a proud and free nation will make him follow up the causes of this enviable condition. Let our nation not shun this examination; let our nation, indeed, invite it, provided it be not superficial. Netherlands society is composed of so many varied elements that a superficial examination can only produce erroneous impressions. The foreigner will be able to reap advantage from a minute and careful study of our manners, of our laws, and of our privileges, even as we propose to derive from his visit the benefit of his experience.

"One great fact governs our whole history, which must above all attract the attention of foreigners; it is that a nation which has remained faithful to the principles that obtained for it its independence—a nation which will never forget that the dying cry of your Royal Highness' great ancestor, 'My God, have pity on me and my poor people!' was the prayer whereby a brilliant future was opened to us—a nation which, so long as Dutch blood flows in Dutch veins, is bound by an indissoluble link of attachment and faith to the House of Orange, mindful of the responsibility

that a previous generation has laid upon it, will, whenever it is a question of its rights and privileges, fight by the side of its King under the motto, 'Je maintiendrai.'"

To this eloquent address, delivered with a fire and spirit of which we Englishmen erroneously deem the phlegmatic Netherlander incapable, but with which the impassioned utterances that have been happily preserved to adorn the pages of European history show the Dutch of all ages have on occasion proved themselves imbued, Prince Henry replied as follows :

Prince Henry's
reply.]

" Mr. President of the Central Society for the Encouragement of Manufactures and Mechanical Industry in the Netherlands, and Gentlemen, Members of that Committee, highly esteemed Representatives of foreign Powers, Commissioners, Ministers of the King, noble and honoured Burgomaster of Amsterdam, &c., and all of you who manifest by your presence the interest that you take in the proceedings of this day, it is a real pleasure to me to find myself on this spot, in the faithful capital of the Kingdom, to perform the honourable task of opening in the name of the King this International Exhibition of objects for the use of the working-classes.

" Receive, Mr. President, my sincere thanks for the hearty patriotic speech with which you have welcomed me.

" With much satisfaction I have learnt the co-operation your Society has met with at home and abroad in its labours to attain the lofty aims that we find represented in this Exhibition, namely, to raise the social, moral, and material condition of the working-man, by manifesting an upright kindly interest in him, and by placing within his grasp means of development.

" May this honourable, but difficult, task that you have undertaken bear the most salutary fruit, both in the Netherlands and in all those countries who prove by their presence at this Exhibition the interest they take in the attainment of similar ends.

" May your manly efforts in all herein concerned meet with the sincere and powerful support that they require, in order to give new strength to the links of mutual confidence, love, and affection, which, for their own quiet and orderly development, it is necessary should exist in every land between the different classes of society.

"The co-operation and support which your Society, Mr. President, has already received from so many quarters, and in so many shapes, may, let us hope, prove an earnest of the success of this Exhibition, through which new sources of well-being and development may be discovered in the Netherlands, and in the other countries which have taken part or interest in the objects of this International Exhibition.

"In the name of the King, patron of your Society, I beg, Mr. President, warmly to thank all, Netherlanders and others, for their co-operation in your Exhibition, and especially the Foreign and Native Commissions here present, with the assurance that they are heartily welcome in the Netherlands and in this capital.

"In the name of the King I declare the International Exhibition of objects for the household and use of the working-man to be now opened."

Immediately upon the conclusion of this reply, the folding-doors into the nave of the building were thrown open; and as Prince Henry and his attendants passed through, a thousand voices burst into the Choral Workman's Song, for the following spirited and accurate translation of which I am indebted to a poetical friend:—

"No monster of iron on gunpowder fed,
No clangor of steel, no whizzing of lead,
Makes the blood in our arteries tingle;
But the whirl of the wheel, and the whistle of steam,
And the bubbling hiss of the seething stream,
Is the sound where our sympathies mingle.

Workman's
choral song.

"No laurel that drips with the blood of the brave,
No crown that hangs over the conqueror's grave,
No wreath that is woven in weeping;
The olive that circles the forehead of toil,
The meed of the master of metal and soil,
Is the fruit that we glory in reaping.

"Oh! the roar and the foam of the fiery stream!
Oh! the rush and the shriek of the bursting steam!
No warrior's clarion is louder;
We, too, have our iron, our steel, and our lead,
But ours is living and theirs is dead,
And the music of Peace is the prouder.

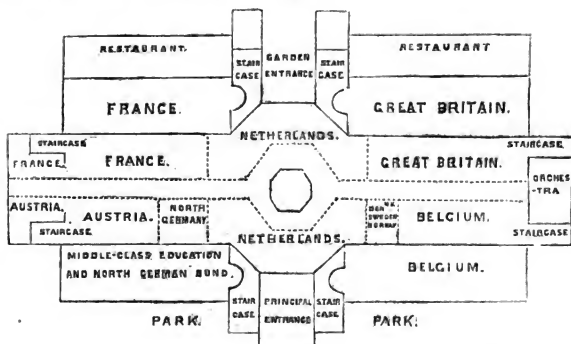
"Then a song shall arise in melodious might,
To God who has severed the dark from the light,
And the work and the workmen created;
By the play of the muscles He holds us in health,
By the sweat of the brow can endow us with wealth,
In the love of our labour elated.

"We sow for the weal of the loved ones at home,
 We know in good time that the harvest will come,
 He wins who has honestly striven ;
 Our toil is the salt of the bread of to-day,
 And the food of our hearts is the faith that can say,
 'We, too, have our rest and our heaven.'"

Prince Henry's
 progress
 through the
 building.

On entering the Exhibition, His Royal Highness found himself in the Netherlands Department; and after a hurried glance at the objects it contained, commenced his progress through the different courts or countries, by a detailed examination of the cutlery and other practical articles of the first necessity, which were displayed in rich profusion among the exhibits from Great Britain.

Some idea may be formed of the relative space occupied by each country, from the accompanying rough-ground plan of the Exhibition building:—



Accommoda-
 tion for
 working-class
 visitors.

From England Prince Henry passed into Belgium, and thence made the round of the remaining countries, being received at the entrance of each by its Commissioners and Jurors. Passing out of the building, His Royal Highness examined with great interest and minuteness the accommodation provided for the working classes of all countries visiting the Exhibition. For this purpose, three buildings, capable of housing 200 visitors at a time, had been specially erected just without the precincts of the Exhibition, by the organizing Committee, under the efficient superintendence of M. Van der Vliet. The accommodation was divided into two classes, for which 60 cents, and 40 cents (1s. and 8d.) per diem was charged respectively.

This included a clean bed, with ample bedding (each room being double-bedded), gas light, any quantity of water for washing or drinking purposes, and the use of a hand-basin, towel, looking-glass, chair, table, &c. Everything was bran new in these model caravanseries, and a pattern of neatness, cleanliness, and simplicity. The restaurants intended for the working-classes visiting the Exhibition, were within its precincts, and provided excellent dinners at 9d. a-head, and other refreshment of the best quality at the lowest possible price. The statistics of the use made of these buildings by visitors, will be given at a later period of this Report.

Into all these details Prince Henry entered with evident interest and appreciation; and he finally completed the range of his experience by partaking of a luncheon that had been prepared for him in a full-sized model workman's cottage, erected within the grounds.

In the evening His Royal Highness was entertained at a banquet, after, or rather during which, as is the Dutch fashion, some admirable speeches were made by Prince Henry, Baron Mackay, the Belgian Envoy, and the President of the Austrian Commission, who respectively returned thanks for the King, proposed the health of the working-classes, the Diplomatic Body, the Foreign Commissioners, &c. Unfortunately, no provision was made for reporting these speeches, more than one of which was distinguished by a rare combination of courage and skill in dealing with many of the social problems of the age in the presence of the representatives of every kind of autocratic and popular machinery yet invented for the rule and governance of mankind. As was stated at the time in the columns of the "Times," it is greatly to be deplored that no record was preserved of what was said on this occasion.

Evening entertainments.

In the evening a display of fireworks in the Exhibition grounds closed the proceedings of a long day; and on the following morning, at 11, the building was opened to the public on payment of a franc (half a Netherlands florin, or 10d.), and the rapidity with which it was filled by eager visitors of all countries, ages, sexes, and conditions, may best be gathered from the following description of the crowds who thronged the streets of Amsterdam during July, August, and September last, extracted from a letter from the special correspondent of an enterprising British newspaper:—"Boors in long black frock-coats, buckled

shoes, and bishops' leggings; women in all sorts of comical head-dresses, some with gold or silver skull-caps, others with horns of gold or silver-twisted wire sticking out from each side of their face, some with blinkers of the same precious metals, caps of wondrous design and manufacture, and dresses of every imaginable cut, colour, and texture—flaming scarlet, bright pea-green, black, white, and grey; while a goodly number, with the proverbial indecision of their sex, had compromised the matter by wearing gowns and mantles red on one side from top to toe, and black on the other." This last statement is not exaggerated, such being the conspicuous and picturesque costume of a large and wealthy orphanage of Amsterdam.

As has been already mentioned, this Exhibition, the formal opening of which has just been recorded, was divided into seven classes. I shall now proceed to an examination in some detail of each class; of the most remarkable articles in each class; of those which figure in the final awards as obtaining medals or honorary mention; and those which popularly attracted most attention.

CLASS I.

Class I.—*Dwellings.*

Dwellings.

The dwelling-house being the first requirement of civilized society, and the one which, in a well-organized community, it should be possible to accept as affording an index to the other conditions and requirements of its inmates—of their wages, their food, their clothing, their education—naturally ranks first. Class I was, therefore, shortly termed "Houses," but included institutions for the use of working-men, plans of dwellings for married and unmarried working-men, and agricultural labourers, plans of bed-rooms, kitchens, boarding-houses, washing and reading-rooms, and places of amusement. It also included any portion of these buildings; model dwellings, materials for buildings, experiments with cheap materials, mortar, iron, concrete, &c., felt and other covering for roofs; foundations, means to prevent damp, &c.; in short, it included every element or component part of domestic architecture.

In considering Class I, "Houses," two apparently conflicting interests have to be conciliated: the requirements of the proprietor and of the inhabitant; the hygienic and the financial, or the moral and material questions.

CLASS I.

Objections to
familisteries.

The proprietor often only wants a good return for his money; *i.e.*, a rent representing a fair per-centage on his outlay. In towns where ground is costly and measured by the inch, the necessary reconciliation is often effected by the erection of many-storied barrack-like buildings, in which families are packed in layers like herrings in a barrel. There is, indeed, much to be said in favour of this system. The bulk of the population of such houses is removed from damp cellar life and surface drainage into realms of purer air; but at what moral cost? At the cost of losing individuality and the sense of home with all the attendant virtues such a sense brings with it. Habits of cleanliness, neatness, and sobriety, are not likely to be improved by daily and hourly contamination from the unclean, the untidy, and the unsobber; and a per-centage of such does exist in every class of our society. The tendency of such a heaping-up of human beings is to force them to assume one level standard of a low average on the whole community. Each family is brought into immediate contact with the wants and misfortunes of its neighbours; the result is only too natural and inevitable. Among such a population there is at all times a certain amount of illness, of hunger, of drunkenness, of ruin, of despair, and other unhappy elements. These elements meet on the stairs and in the passages the redeeming elements of health, of sufficiency, of sobriety, of cheerfulness. The redeeming elements are seldom in a majority, and the result is the formation of a morbidly despondent colony of families and individuals, containing many families and individuals who might be happier, and healthier, and better off, if not perforce compelled to mingle with their less fortunate or moral brethren. It has been well said that "the lower we descend in the social scale the less is the self-restraint, the greater the passion and violence, and *the greater the need of a certain extent of separation.*"

Among the valuable evidence adduced on this subject at the Paris Exhibition of 1867, not the least important was the following statement of M. Veron when maintaining the superiority of the four-house block and garden system of Mulhouse, where practicable, over the "*cités ouvrières*," or what have been termed perpendicular streets. "After due deliberation," said M. Veron, "the Committee unanimously rejected the principle of the great barracks which had so ill-succeeded in Paris and elsewhere. If these

CLASS 1.
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buildings have the advantage of economy in ground-rent and cheapness of construction, they have, on the other side, in the agglomeration of the population, a crowd of inconveniences, the least of which is the repugnance of the working-classes to this sort of dwellings."

Mr. Edwin Chadwick, in his excellent Report on Dwellings, published in the 3rd volume of Reports on the Paris Exhibition of 1867, presented to Parliament in 1868, goes even further still. He practically rejects the four-house block and garden Mulhouse system with the following remarks:—"In blocks of four contiguous houses one morose owner, one shrew or common scold, or one set of ill-conditioned children, from whom there is no power of escape, may make the habitation of the other three unpleasant, and render most desirable the right of forcible eviction;" and he tells us further how penal statistics teach that a too close aggregation of ill-trained people works badly. How, in a court, a common pump has kept an attorney in good practice:—A little girl going to fetch water would be thrust aside by a big girl, and being saucy, would be beaten; the mother of the little girl would come out and beat the big girl; then the mother of the big girl would come out and straightway attack the mother of the little girl; then the husbands would come out to do battle for their wives and children; and then, if Irish, sides would be taken by the other occupiers of the Court, when a battle royal would ensue, terminating in prosecutions for assault and battery, and work for the attorneys.

Though this is no doubt a lively picture of the evils of agglomeration, it does not touch the worst features of the case. Boys at school may form sides and fight without breeding bad fellowship or immorality, and it is only charitable to suppose that a court or alley population, especially with the introduction of a large Irish element, may do the same. The worst features in the "*cités ouvrières*," or perpendicular streets, are the silent negative ones that do not assert themselves even on close inspection; the callousness to suffering and misery bred by every-day and all-day contemplation of wants, physical and moral, which those who contemplate them have no means of adequately relieving; the gloom engendered by the daily visit of the doctor to some inmate or other of the overgrown bouse; the frequent visits of the undertaker; and a thousand other occurrences incidental in a given ratio to the popu-

lation, but which it is not healthful to have paraded constantly before the eyes of those whose turn has not yet come.

CLASS 1.
—

All this happens in such buildings in a time of health, and under normal conditions; but it is under abnormal conditions, which will occur at intervals—conditions of contagion, of famine, of strikes, of fire, &c., that the “*cité ouvrière*” is seen to its greatest disadvantage as an institution. On the horrors of such periods it is needless to dwell; they appeal to the imagination with only too great readiness and reality; but still it is necessary not to overlook them in an inquiry of this kind.

With these preliminary observations, which I am unwilling to extend, we shall turn to an examination of the phases of the dwelling question, as represented the other day at Amsterdam.

Probably few towns in Europe stand more in need of improved dwellings for the working-classes than Amsterdam, and therefore it was natural that the Dutch exhibits in Class I should be of an important nature. No less natural was it that the British exhibits in this class, crowned as England was with laurels at the great international fair of 1867, should be somewhat scanty in number, and essentially practical in character, being principally confined to improved articles of construction, or advance in economy or detail of execution. The bulk of the wage class of Amsterdam inhabit cellar or basement dwellings, varying in depth, but always some feet below the water-level of the inevitably neighbouring canal. A fair average specimen of these dwellings, for which at least 2s. a-week is paid, has been accurately described as follows:—“I went down six steps, and found myself in utter darkness. The weather was very fine, the air was dry, but the brick floor of the cellar was moist, and the walls reflected the light of the candle, which was lighted in honour of my visit.” Such dwellings are naturally liable to sudden inundations from heavy rainfall at any season of the year, and are especially unhealthy during thaw. In sharp frost they are extremely prejudicial, owing to bad ventilation and easy overheating beyond the sanitary point. Taken altogether, they probably combine most of the worst conditions of life, as judged by modern science. Yet notwithstanding this, and notwithstanding the extreme difficulty in Amsterdam of procuring ground area for horizontal streets of workmen’s

Dutch exhibits
in this class.

CLASS I.

houses, the "cités ouvrières" are highly unpopular in that commercial capital. Within the last fifteen years, indeed, such buildings have been erected; but the leaning of the class concerned is towards isolated dwellings and non-aggregation. This leaning, like every other demand, is producing a supply; and among others a house has been produced and exhibited in full size, of which the following is some account:—

The Bouwkas.

The cottage in which Prince Henry took luncheon, as has been stated above, was erected in the grounds of the Exhibition by an Amsterdam society for improving the condition of the working-classes, entitled the "Bouwkas," or building fund. So great has been the demand for these houses that sixty-eight have been built within the distance of a mile from the Exhibition; fifty-four of them are single, and the remainder two-storied; the rent being 2*s.* 6*d.* and 5*s.* a-week respectively. The single-storied dwellings are mostly inhabited by artizans whose annual wage averages 15*s.* to 1*l.* a-week. The price of their construction is stated to be 1,100 florins, or about 92*l.* Each covers an area of 31½ square mètres, and has an open yard behind of 13½ square mètres, containing a tub to catch rain water, and an outhouse. The cubic contents of its two rooms is 78½ mètres; that of the loft, or garret, 43½ mètres. The double-storied house covers 38½ square mètres, and has on each floor a cubic measurement of 103½ cubic mètres; that of the loft being 53½. In the single-story house there is a bed recess in the room by which you enter, and two or more in the garret. The roof, which is of tile, has in it a window, which will open. A common complaint of such dwellings is, that too much has been aimed at in their design. The accommodation is diminished by being too much cut up. One good room is sacrificed to two bad ones: a front room of 3 by 3·70, and a back one of 4·17 by 3·17 mètres; the height is 2·85 mètres. The front room is intended for the sleeping-place of the parents; the back for the living room. Of its accommodation, however, 2 square mètres must be deducted for the space taken up by the ladder leading to the garret, for the stove, a chest, a stone sink, and a dresser. Complaints are made of the difficulty of keeping things tidy in so small a room, and the tendency is to stow everything not immediately required, or actually in use, in the loft where the children habitually sleep. This

practice, extending to fuel, potatoes, preserved food, such as salt fish, &c., can but have a prejudicial effect on the growing generation. Still, as has been said, these dwellings are popular in Amsterdam; and those in use, to which a supply of excellent water from the dunes has been laid on, are proved by statistics to be more salutary abodes than either the "cités ouvrières" or the cellar dwellings. The demand for them is, consequently, on the increase.

Models of workmen's houses on the scale of one-tenth are exhibited by a similar society at the Hague, and by M. Kleiweg Dyserinck, of Haarlem. These are blocks of four houses each, each house consisting of one room with an antechamber or wash-house, containing outhouse, stone sink, and cupboard. The inner room is 4.50 by 4 mètres, and there is a spacious cellar for storing fuel, &c. In one corner is the stove, with a chimney containing a very good parallel ventilating flue. In addition to this there are gratings close to the floor, which do no good, as the inhabitants invariably stop them up on account of the draught they occasion. The cellar, to which access is obtained through the cupboard door in the antechamber, is airy and light. By an outer stair, under which is a small cupboard opening into the inner room, a second floor is gained, composed of two small rooms of equal aggregate size to the room below. In the smallest is a good sized cupboard, and an iron bed place attached to the wall. The larger room may be used as a drying place for clothes. The ceiling of both is formed by the wooden roof covered externally with zinc. The height of the ground-floor room is 3.10, and of the upper floor 2.55 mètres. The windows open nearly up to the ceiling, and provide perfect means of ventilation. Each dwelling has a habitable area of 42 square mètres. Those facing the street let at 2s. 11d., the others at 2s. 6d., a week. The society calculates on a return of 7 per cent. on its outlay for such cottages. They are very popular, and are considered exactly suitable for artisans earning about 1*l.* a week; one-seventh being the Dutch theoretical fraction of an income appropriate for house-rent.

Hague and
Haarlem
exhibits.

The Haarlem model differs little from the above description of the Hague Society's cottages.

One of the best models for rows of cottages is supplied by the Dutch Carpenters' Society ("Tot Nut voor den Timmerman"). This represents a block of eight buildings,

Dutch
Carpenters'
Society's
exhibits.

CLASS I.

each with a separate entrance opening immediately into the living-room. This is 3·75 by 4·50 mètres, has a sleeping place or alcove of 2 by 1·25 mètres, a cupboard, and a stove. Each house has also a kitchen of 3·55 by 2·25 mètres, an outhouse, a sleeping-room of 2·55 by 2·25 mètres, and under it a cellar. The kitchen contains a cooking-stove, a stone sink, a dresser, a cupboard, and a place for stowing fuel. Each house has its own stairs leading to a second story of three rooms of similar aggregate dimensions to those on the ground-floor, and to a loft or garret above. Every room in these houses has a ceiling; the ground-floor rooms are 3 mètres, the upper ones, 2·85 mètres high. Ventilation is secured by air-holes or gratings opening into the space between the floor and ceiling, and by parallel flues in the chimney. This block, which covers 620 square mètres, costs 14,450 florins, or about 1,204*l.*, not including the price of the land.

M. Veth's
cottages.

Some of the most generally popular workmen's dwellings, of which models and plans were exhibited, were a series of fourteen double cottages, erected at Dort by M. K. W. Veth in 1864-67. They face east and west, and have two fronts, one family occupying the ground-floor, and another the first story. Each family enters by a porch containing an outhouse; in the case of the first-floor family, this porch is reached by a broad solid stair springing from the garden of 50 square mètres, which each family has on its own side of the house. Each garden contains a pump and drying-ground. Each dwelling occupies 47·25 square mètres (is 7 mètres long and 6·75 broad). From the porch you enter a living room of 4·60 by 3·50 mètres, with two windows, a fire-place in the middle of one side of the room, having a cupboard on the one, and a sleeping alcove on the other side of it, and in the back wall two doors, one leading to a well lighted kitchen with a chimney and stove, two large cupboards, a dresser, and a small cellar for storing potatoes, &c.; the other door opening into a sleeping-room 3 mètres by 2·60, equally well lighted, with two bed places. The internal arrangements of the upper and lower dwellings are precisely similar, except that the lower has an altitude of 2·80 and the upper of 2·60 mètres. The garret is wainscoted, and can be equally divided between the two families; the upper one entering by an in-door ladder, and the ground-floor family by an out-door ladder, leading to an end gable

window. The underground cellar can likewise be divided, and entered by the ground-floor family, if desired, from the inside of the dwelling, and by the upper-story family by some steps from their garden. Usually, however, the ground-floor family takes the whole cellar, and the upper family the whole garret. In either case the two families need never meet, and there need be no collision nor even communication between them if not desired by themselves.

These cottages at Dort are built of hard yellow brick; the walls of the ground-floor are about 9 inches thick, those of the upper story something less. They are roofed with blue tiles. The flooring of the living- and sleeping-rooms is of thick wood on strong beams, with good stucco ceilings underneath to deaden the sound of footsteps, voices, &c. The kitchens and cellars have tile floorings; the ground-floor is raised about 18 inches to escape damp, and to introduce thorough ventilation. The use of wooden bedsteads is prohibited in these cottages; one iron bedstead is provided for each family, and more can be hired of the proprietor at 3 cents a week a piece. The rent of these dwellings is 2*s.* 6*d.* a week.

These fourteen houses for twenty-eight families cost in all 2,880*l.* including pumps, wells, a bridge over a canal to reach the dwellings, laying out the gardens, hedges, supervision of work, &c.

The price of the ground was exactly 200*l.*, making a total cost of 3,080*l.* for the fourteen double cottages; that is 220*l.* for each, or 110*l.* for each individual dwelling. It is calculated that these dwellings will be occupied and bring in rent for fifty out of the fifty-two weeks in the year, and as yet they have done so. This would make the fourteen double cottages at half-a-crown a piece bring in 175*l.* per annum; and deducting 21*l.* for annual repairs, (a sum which will accumulate for the first few years) 154*l.* remain as net revenue return for the 3,080*l.* invested, or exactly 5 per cent.

With suitable precautions in the selection of tenants, and possibly with a slight increase of dimensions for the living- and sleeping-rooms, there can be no doubt this model would prove a highly satisfactory dwelling for the artizan.

As has been said, Great Britain did not exhibit any large models of houses or showy objects in Class I. With

English
exhibits.

CLASS I.
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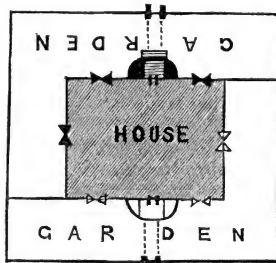
the exception of articles of construction and detail, to be mentioned hereafter, she only sent plans and designs for detached cottages and "*cités ouvrières*" or town blocks of dwellings. Among the most admired of the former ranked a set of plans exhibited by the Central Cottage Improvement Society, of 37, Arundel Street, London, and among the latter, drawings of buildings erected by the Society for Improving the Condition of the Labouring Classes. Both these associations are already so well known, and the work they perform is already so highly appreciated, both at home and abroad, that it is hardly necessary here to describe in detail their exhibits at Amsterdam. Both of them received the highest order of award. On one point, however, it may be well to touch with reference to the Central Cottage Improvement Society, especially in connection with the description that has gone before of the workmen's dwellings exhibited by Mr. K. W. Veth of Dort. One of their latest models is of a dwelling one story high costing (it is not quite clear whether this is without the price of the land it stands on, but it is presumed that it is so), 100*l.* single, or in pairs 170*l.* Now in a recent annual report that society stated it had received from the Royal Commissioners on the employment of children, young persons and women in agriculture, an important communication conveying in unequivocal language the following expression of opinion. "In reference to the question of designs for cottages, the Commissioners desire to direct attention to a point which has come before them very prominently. A great preference appears very generally to be given by the wives of agricultural labourers to cottages having all the rooms on the ground floor. They say they are better able to look after the children or the sick where they are in rooms adjoining the living-room; when the mother is upstairs for any domestic purpose the younger children cannot be so safely left alone, and other obvious risks and inconveniences are likely to ensue. Some influential landowners are therefore returning to the plan of having all the rooms on the same floor, although at increased cost to themselves." This view is entirely corroborated by the popularity of the Dort dwellings, which, though double-storied, are practically one-floor cottages; the only difference between the two stories being the necessity of a gate or half-door at the entrance of the porch of the upper flat as a precaution against

accidents to children. This Dort model therefore appears at first sight to be in several ways an advance in principle on the Central Society's cottages; and at any rate merits particular study. It contains so many elements of comfort and health, with its double front and garden on both sides, with the possibility it affords of so arranging the windows of each flat as not to overlook the garden or approach of the other, as to combine to a great extent, even in its actual phase, the desirable condition of economy with the comparatively isolation which is known to exercise so beneficial a moral and physical influence on the well-being of the working-man and on the formation of habits of respect for property and the laws in general.

I have said even in its actual phase, for the principle appears capable of further extension, and it is probable that still greater results might be obtained by the application of, for example, the Dort design for double-storied but single-floor tenements, to the well known Mulhouse block system. The two systems are easily delineated thus :—

Combination of
the Dort and
Mulhouse
designs.

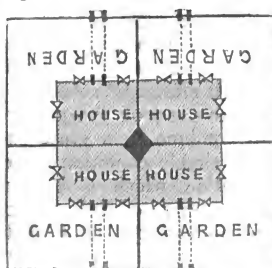
THE DORT DOUBLE DWELLING.* (For two Families.)



* The deep shading represents the porch, windows, &c. of the upper story tenement.

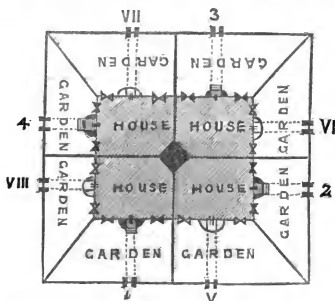
CLASS I.

THE MULHOUSE BLOCK.* (For four Families.)



* These cottages are single or double storied, as required.

A combination of the two would produce the following ground plan, providing under one roof accommodation for eight families, four on the ground-floor, and four above, each having its own separate entrance and garden.

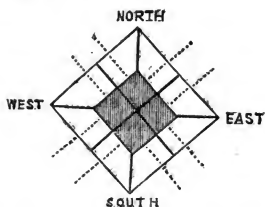


Nos. 1, 2, 3, and 4 represent upper story tenements reached by Swiss covered stairs.

Nos. V, VI, VII, and VIII are ground floor tenements.

Such a block, capable of accommodating eight workingmen's families, could probably be built of good dimensions, and including the ground for 400*l.*, that is at 50*l.* a dwelling, which at 5 per cent. would make the rent of each 50*s.* per annum, or say 1*s.* a week, allowing, as M. Veth of Dort does, for their being unoccupied on the average for two weeks in the year. Such dwellings might contain two rooms, each dwelling having its porch entrance

with outhouse attached, on M. Veth's model; the upper ones reached by Swiss stairs, with storage-room for coals, &c., underneath, giving the block, with slightly projecting roofs, a very neat and pretty aspect. Each dwelling might have a window on each side of its door; one of the rooms (the larger one) would then have an outer door leading into the porch, and a window for light and ventilation; the other (the smaller one) would have a window, and a door into the larger room; or, if found desirable, the interior accommodation might be further cut up by the addition of a third room, lighted by half of one of the windows, which might be made to open cottage fashion. The kitchen stove might be placed at the back of the large room, so that one good chimney, with ventilating shafts or flues for each dwelling, would be sufficient for the whole block. Each dwelling would thus only overlook its own little garden; and by placing the block diagonally to the points of the compass thus—



—no one dwelling would have a northern aspect, and each household would in turn be gladdened by the health-giving rays of the sun, to the enhancement of the value of its garden as a drying-ground or vegetable producer.

On the same pattern, but on a smaller scale, eight single-room dwellings for unmarried workmen might be constructed at a still more moderate cost, so as to enable their being profitably let at under 1s. a week.

To the important points here touched upon, Captain Dashwood, who was Vice-President of the International Jury in Class I, and who is a member of the Council of the Central Cottage Improvement Society, will no doubt have turned his best attention; and I therefore deem it my duty to forbear from pursuing this interesting inquiry any further at the present moment, leaving to the public and to those specially interested in these matters the task

CLASS I.

of taxing the value of the suggestions I have hazarded, and of working out the necessary details.

Mr. Watson's designs.

In this class a bronze medal was awarded to John Edward Watson, Esq., of 59, Grey Street, Newcastle-on-Tyne, for six drawings of workmen's dwellings strongly marked by the practical character which pervades all the creations of the north country whence they came.

Mr. Harding's exhibits, roofing, &c.

Among the articles of improved and cheap construction exhibited by Great Britain in Class I, roofing took a high place. Mr. James Harding, of 20, Nicholas Lane, Cannon Street, London, exhibited from his steam works at Dod Street, Limehouse, East and West Ham, samples of so-called "unflammable roofing felt," of patent indestructible carbon, metallic paint and dry colours, and of a flexible floorcloth. For the first of these articles Mr. Harding obtained a silver medal. This roofing claims to be specially adapted for cottage use. Being flexible, it can be stretched over rafters without preliminary boarding, as is necessary with asphalt. It is cleanly, strong, and durable, is said to be free from smell when exposed to the rays of the sun, furnishes a very suitable material for covering farm buildings, railway carriages and trucks, and is even applicable for sheathing ships. It is made in lengths of 25 yards, by 42 inches broad, and is sold at 1½d. the square foot. The paints combine the advantages of rapid drying, and being at all times ready for use. They are applicable to stucco, wood, iron, ships, &c. All colours are sold, pots included, at 1l. 8s. per cwt. This house also furnishes efficient waterproof lining for damp walls, floors, &c., at the very moderate rate of 1d. the square foot; carbonized oil dressing for roofing, tarpauling, &c., at 1l. per six gallons (or 3s. 6d. per gallon); a cheap, durable, and superior flexible floorcloth at 2s. the square yard, and a floor cloth for passages from 18 to 60 inches wide from 10d. a yard upwards.

Messrs. Anderson's exhibits.

Further exhibits in roofing included some good samples of English asphaltic roofing felt, by Messrs. D. Anderson and Son, of Belfast, which obtained honourable mention, and by Messrs Engert and Rolfe, of Upper Barchester Street, Poplar New Town, London, who obtained a bronze medal.

Messrs. Engert and Rolfe.

This last firm also exhibited a fibrous asphalt for foundation walls, to prevent damp from rising. In Holland, where the foundations of all houses are literally laid in

water, and where the common Archimedes screw pump has to be kept constantly at work while digging and building foundations, this invention is likely to find a large sale. The system was well illustrated by a model house brick foundation with anti-damp courses, fixed in an iron cistern with water up to a given level to show effect. It furnishes an effectual and easily applied remedy for damp rising from foundations, and can be supplied in London at $1\frac{1}{4}d.$ the square foot. In naming this house, one cannot omit a mention of their hair felts in long lengths for covering steam-boilers. This article, of which Messrs. Engert and Rolfe state themselves the only manufacturers, is a non-conductor of heat calculated to save 20 per cent. of fuel.

CLASS I.

Drain-pipes were also strongly and well represented, and obtained for Great Britain three awards in this class; viz. :—

Draining
exhibits.

1st. A "Diplome d'Excellence" awarded to Messrs. Joseph Cliff and Sons, of Wortley, by Leeds, for a magnificent display of huge salt-glazed fire-clay draining pipes, which "appealed not only to builders and engineers, but to all visitors, who regarded them wistfully as possible preventatives of those odoriferous breezes which furnish perpetual reminders that Amsterdam is not yet drained." This enterprising firm undertook to deliver this article at Amsterdam at the same price at which it supplies the London market.

2nd and 3rd. "Mentions Extraordinaires" were conferred on the monster firm of Messrs. Doulton and Co., of Lambeth, of Rowley Regis in Staffordshire, of Smethwick, near Birmingham, and St. Helen's, Lancashire; and upon Messrs. Gallichan and Co. of London.

Gas-meters, cooking-stoves, and fittings generally, likewise showed well in the British section of Class I. "Diplomes d'Excellence" were awarded to Messrs. G. Glover and Co., London, for meters; and to Messrs. W. Blews and Sons, of Birmingham, for fittings. A silver medal was granted to Mr. C. J. Philp, of 29, Caroline Street, Birmingham, for chandeliers; and bronze medals were bestowed on Messrs. T. H. Phillips, London, for cooking-stoves, and on Messrs. Partridge and Co., Birmingham, for gas-brackets.

Gas-meters,
stoves, and
fittings.

The first-mentioned of these houses, that of Messrs. George Glover and Co., of Ranelagh Road, Pimlico, deserves especial praise for their 19s. working-men's dry meter. The value of gas as a light giver and as a fuel both for heating and for cooking purposes, becomes ever

Working-
man's meter.

CLASS I.

day more widely recognized. That the result has been an immense and continuous increase of consumption will surprise no one, though few will probably be prepared for anything approximate to the fact. It has been stated on authority that the gas consumption of about one-fifth of London (which was supplied by the Imperial Gas Company) increased from 216,000,000 of cubic feet in 1830 to 448,000,000 in 1840; from 898,000,000 of cubic feet in 1850 to 1,982,000,000 in 1860; and from 2,637,000,000 of cubic feet in 1865 to 2,838,000,000 in 1866: that is to say, roughly speaking, it has doubled itself each ten years. Meanwhile, the price of gas has decreased from 13s. 6d. per 1,000 cubic feet in 1830 to 4s. per 1,000 cubic feet in 1866; thus bringing the article within the reach of every class of society. Another instance of this increased consumption is given by Mr. West Watson, the City Chamberlain of Glasgow, who stated in a report printed in 1866, that the gas consumption of that city increased 50,000,000 of cubic feet per annum. All this means, in other words, that the artizan is now consuming gas. The want of a reliable yet cheap working-man's meter to protect his interests and those of the company which supplies him, which last condition is of the utmost importance to him, as it regulates the supply price, had thus become manifest. How far this want has been appreciated by the enterprising firm now under review may be gathered from the following memorandum, written for the Amsterdam Exhibition. How far it has been met by them, can only be measured by the sale of the article they have invented, and by the results of the competition to which it must be exposed:—

“Light is a primary object of importance to the working-man, and the economy of gas light is so obvious and generally admitted that one or two illustrations will be sufficient. The cost of a sperm or wax candle burning for $2\frac{1}{4}$ hours is 1d. The cost of the commonest dipped tallow candle is 1d. per $5\frac{1}{2}$ hours. While common coal gas, at 4s. 6d. per 1,000 cubic feet, will give the same amount of light for 44 hours, and cannel coal gas, at 6s. per 1,000, for 55 hours for 1d.

“Gas is no mere luxury, but has become one of the necessities of life to the manufacturing population. To the working-man its importance can hardly be over-estimated; as an instrument in the acquisition of wealth

every one admits its value ; and its relation to our domestic and social well-being, our manufacturing and mercantile prosperity, is too obvious to need further remark.

“ And only second in importance to the gas itself is the question of its fair and equitable measurement, which in Holland has not received all the attention it deserves. But the Government are now making arrangements to provide standards of sufficient accuracy, so as to accomplish this very desirable object.

“ The mere fact that gas is not a solid or liquid like candles or oil, but an æriform body, makes it more difficult to measure ; but not less desirable that the seller should be paid for all the gas he delivers, and that the purchaser should obtain the full quantity he pays for. A correct gas meter therefore, which cannot be tampered with, gives mutual confidence to the buyer and seller of gas.

“ The construction of such a meter involves a multiplicity of chemical and mechanical considerations to each of which due weight must be attached. A subtle, invisible elastic æriform body, very complex in its chemical constitution, susceptible of change in condition and volume from slight variations in temperature and pressure, has to be accurately measured, and the result of that measurement must be accurately recorded. The instrument must be self-acting, and must act in a closed chamber, continually or at intervals, requiring no adjustment or interference of any kind. All its parts which come in contact with the gas must be made of anti-corrosive metal ; while the materials, forms, and combinations, of its different parts must be so arranged and so adapted to each other, that when put together as a whole, it shall work easily, steadily and correctly.

“ In Glasgow and the West of Scotland, where there is a very large population of working-men, thousands of small gas-meters, sufficient for two or three lights, are used by them, in connexion with fittings which can be purchased for a few shillings. The working man purchases his small dry gas-meter for 19s. 6d., and when he moves his residence takes it along with him. The meter is placed either on a shelf, or frequently hung upon the wall like a clock.

“ There is great economy in the working-man's family where gas is used for heating as well as lighting. In a few minutes, at the most trifling expense and with no trouble, warm coffee or tea can be prepared. The con-

CLASS I.

venience of this is apparent in the early morning, before he commences his daily work, or when he returns at night exhausted with his toil. Besides, if he has a wife, it is of great importance in preparing a little warm milk or food for her baby or sick children, when her numerous duties put it often beyond her power to kindle a fire, especially during the night, or in warm weather. The economy of time, money, and trouble, under such circumstances cannot be overstated, so that we are justified in the statement made at the commencement, that gas has really become a necessary of life in the seats of human labour, and that every contrivance which cheapens the accessories to its use, brings it within the means of the working-man and confers on him a very important benefit."

Of this house Captain Webber and Mr. Rowden, in their Report on the testing-house at the Paris Exhibition of 1867, spoke in the following terms of unqualified praise:—

"Mr. G. Glover, of Ranelagh Road, Pimlico, London, was the only manufacturer who sent meters to be tested.

"One may fairly suspect that a reason which influenced makers in refusing to send meters for trial was the undoubted laxity which prevails in gas measuring.

"In London alone about 14,000,000,000 of cubic feet of gas are consumed annually, for which a sum of 2,800,000*l.* is paid. It is therefore surprising that more care is not taken to provide reliable gas-meters.

"Mr. Glover is a manufacturer of dry meters only, so no opportunity presented itself of comparing their accuracy with that of wet meters under various circumstances; but the perfection to which that maker has brought his meters prevents the possibility of those extravagant errors which are well known to exist where wet meters are used. The stamp on a dry meter is a guarantee of its accuracy, as nothing short of breaking into the instrument can alter its action; but the stamp on a wet meter merely implies that if the instrument is perfectly horizontally fixed, and the water kept at a certain level, it will register accurately. Now, as neither of these conditions is attainable in practice, it follows that as a measurer of gas the wet meter is defective.

"The working parts of Mr. Glover's meters are constructed of anti-corrosive metal. Other improvements in the valves, leathers, &c., he has secured by a patent."

The important question of gas heating- and cooking-stoves was represented, as has been said, by Messrs. Phillips and Son, of 25 and 26 Barbican, London, on whom a medal was conferred. This firm manufactures these articles in every size and at almost every price, from 7s. 6d. up to over 60*l.*, capable of cooking for one person or 300. Many of the small models are admirably adapted for cottages and dwellings of the poorest kind; in fact, it may be said that, the poorer the household, the greater the advantages derived from gas under proper management and control, and the greater the importance to both tenant and proprietor of its general introduction. In the present state of our civilization it is indeed a matter of the utmost primary importance as regards health, pocket, cleanliness, and as promoting, if well applied, conditions of improvement both moral and physical.

CLASS I.

Gas stoves.

While dilating on the advantages of gas, it must not, however, be forgotten that a long time will probably elapse before this article is laid on generally throughout the villages and hamlets of Great Britain; and that even then there will still exist, though on a smaller scale than now, a demand for ordinary fuel stoves. The lonely English cottage by the side of the wood, the Scotch shepherd's bothy on the edge of the muir, and possibly the collier at the pit's very mouth, will continue to find the fuel close at hand the cheapest, and, for their purposes, the best procurable. The wants of this class, very numerous to-day, must not be forgotten, and were not forgotten at Amsterdam. They were represented by Mr. J. Sparkes Hall, of 308, Regent Street, London, who received an award in another class, and whose so-called "Plympton" cottage stove, presented by the inventor to his tenants and workmen as a suggestion for their increased comfort, convenience, and economy, is an open fire-place available for burning cheerfully wood, coal, or peat, and for baking, roasting, boiling, or frying, at the cost of a few pence. Complete with flues it costs 38*s.*, and merits the attention of all concerned in the housing of the masses.

The Plympton stove.

A "mention extraordinaire" in this class was conferred on Messrs. Duley and Co., of Northampton, for a very practical and handy kitchener.

Messrs.
Duley's
kitchener.

Four more recompensed articles demand notice among the British exhibits in Class I. The first of these was the splendid display of iron and coal samples, exhibited by

Remaining
British exhibits
in Class I.

CLASS I.

the celebrated firm of Messrs. John Brogden and Sons, of Tondy, near Bridgend, Glamorganshire, who rank high among the largest employers of labour in the United Kingdom, and to whom a gold medal was awarded. The second were exhibits of the well-known dry-earth system patented by Messrs. Moule, of 29, Bedford Street, Covent Garden, London, upon whom a bronze medal was conferred. The third consisted in a choice collection of encaustic or mosaic tiles and terra-cotta, exhibited by Messrs. Maw and Co., of the Benthall Works, Broseley, Shropshire, who received a "diplôme d'excellence;" and the fourth, which claims more detailed attention, and obtained honourable mention by the Jury, was Messrs. Strangeman and Walker's (3, Railway Place, Fenchurch Street, London) "Niagara" laundry boiler, soup kettle, &c., of which the sole manufacturers are Messrs. Griffiths and Browett, of Birmingham.

The Niagara
boiler.

The "Niagara" patented invention is of a very simple character. It consists of an inner vessel or lining, made to fit into a laundry boiler, or saucepan or coffee-pot, or cocoa-biggins, and so shaped as to divide the inner part of the boiler into two hemispherical chambers, which communicate with each other through round holes perforated in the bottom, and horizontal openings made in the top of the inner vessel.

When the laundry boiler is about half-filled with cold water, to which finely-sliced soap and the usual washing ingredients have been added in the proper quantity, and the clothing (having been soaked and soaped) is thrown in, and a brisk heat applied; the steam, generated in the bottom of the boiler, rises through the holes in the bottom of the inner vessel, and penetrates through the fabric in the boiler, loosening the dirt attaching thereto; at the same time numerous steamers of highly heated water are precipitated through the openings at the top of the inner vessel, and maintained in circulation through the textile fabrics, completing the cleansing and whitening process without any manual labour or wear to the material and in half the time usually required for washing clothes.

The soup kettle is nothing more nor less than a small boiler or saucepan, with the inner vessel attached, where the water and steam are made to act on broken bones or meat. Every particle of valuable substance is extracted, after which the inner vessel is lifted out, taking with it

the remains of the bones, &c., and leaving the soup clean and beautiful in the boiler.

CLASS I.

The coffee-pot and cocoa-biggins act on the same principle, and require no explanation.

Boilers for dyeing textile fabrics are also made on this principle, and work to the greatest advantage. The boiler may be advantageously employed in cleansing rags, and in obtaining all kinds of extracts in chemical works.

The approximate retail prices are as follows:—

Circulators for coppers of the usual sizes—

Made of tin or iron, from ..	..	10s. to 20s.
„ copper „ ..	..	20s. to 40s.

Oblong laundry boilers, with circulators complete—

Tin or iron, from ..	..	10s. to 20s.
Copper „ ..	..	20s. to 40s.

Soup saucepans, coffee and cocoa pots from 3s. upwards, according to size and material.

A system of house-heating combined with ventilation, by means of hot-water, forwarded to the Exhibition by Messrs. J. L. Bacon and Co., of Farringdon Road, Holborn, London, unfortunately arrived too late to admit of its examination by the International Jury.

The Belgian exhibits in Class I were both numerous and important. In addition, they were more systematically arranged than those of Great Britain. This was partially due, no doubt, to the contiguity of the country whence they came, and to increased facility of supervision; but was due no less to the classifying governing principle which the Belgians have borrowed from their ethnological brethren the French, and which they, like the French, apply unhesitatingly to exhibition or railway arrangement, and all details of life. Their exhibits in Class I were consequently subdivided under four heads:—

Belgian
exhibits in
Class I.

- A. Plans and Models of Dwellings.
- B. Plans of Lodgings, Restaurants, Schools, Baths, Reading and Recreation Rooms.
- C. Details of Construction.
- D. Materials.

One of the first Belgian exhibits that caught the eye on entering the building, was a model of workmen's houses one-fifth of full size. They are on the Mulhouse

CLASS I.

block system, and were erected by Messrs. Gustave Janssen and Co., of Brussels, for the accommodation of the families employed in his candle manufactories. Each dwelling consists of two good-sized rooms, one above the other, each opening into a small back room, equally situated, one over the other. The stair is between the two rooms. Each dwelling has, moreover, a cellar and a garret. Each dwelling disposes of 100 square mètres of ground. The hire is 2 florins a-week. The rooms are somewhat larger than those of the Dutch models, but the out-house arrangements are not equally satisfactory.

Two models from the Association for Building Workmen's Dwellings of Antwerp were highly praised; they were separate cottages, having one large room on ground-floor, two small ones over it, and over that a garret; a cellar, and an open yard behind, two or three times the area of the dwelling, containing an out-house and a pump. The rooms are lofty, and the rent $1\frac{1}{2}$ florins a-week.

One of the most pleasing designs for "*cités ouvrières*," was exhibited by Madame Cordewener, and possesses to the least extent the barrack-like appearance characteristic of this class of dwelling. It is spacious and airy, and specially arranged with a view to maintaining the privacy of its inmates.

Many other models and plans of dwellings were exhibited by Belgium; the cheapest of them all were some designs for cottages exhibited by Crombrugghe's Society of Ghent. One of these represents a dwelling of two rooms, each 4 mètres square by 3 high, with garret, and a small garden, for which only 6 francs per month is demanded. A smaller scale of this dwelling is offered at a rent of only 5 francs a-month. These buildings are, as their price sufficiently denotes, of an unsatisfactory nature, both of construction and material. A superior dwelling is, however, exhibited by the same Association, at 8 francs per month, containing on the ground-floor one good room, and above it two smaller ones, a cellar, kitchen, garret, and garden. These dwellings are attached to different manufactories, and reserved for the hands therein employed.

Some plans of "*cités ouvrières*" exhibited by Messrs. Duyk, of Brussels, obtained a silver medal.

In details and materials of construction, Belgium exhibited some ingenious ventilating methods, and some

good roofing and cements; but she failed to obtain from the International Jury any recompense in Class I, except for iron, zinc, window-glass, wall-papers, nails, and casting. Cements were finally adjudged *hors concours*, owing to the inability of the Jury to test their durable qualities.

CLASS I.

The exhibits of France at the Amsterdam Exhibition, were not marked by any appreciation of its special domestic and economic character. Under these circumstances it is not surprising that, with some few exceptions, France did not take a high place in Class I. Foremost among these exceptions ranks the well-known and honoured name of Jean Dollfus, of Mulhouse, to whom belongs the first place on the Continent among those whose thoughts, directed by the Exhibition of the Prince Consort's model dwellings in 1851 to the consideration of improved house accommodation for the working-classes, have since borne practical fruit. His exhibits in this Class were cottage and village plans on the four-block dwelling system, of which mention has been already made; but in another class he received the highest recompense the Jury could bestow, for the manufactured goods turned out by his workmen, who, well satisfied with their condition in his employ, prove by enhanced zeal in his service their appreciation of the inseparable community of interest which should ever bind together the master and his men. Gold medals in Class I, were obtained by France for metal castings by M. Ed. Zegut, of Tusey, Meuse, and for general excellence of plan and arrangement by the De Blanzey Coal Mine Company, Saone et Loire, by MM. Gemets, Fils, and Herrscher, Frères, of Paris, for heating apparatus, by MM. Nent and Dumont, of Paris, for centrifugal pumps, and by MM. A. Paillard, of Paris, for mirrors.

French exhibits in Class I.

From the North German Bund some very practical and beautifully executed models of peasants' cottages, farm buildings, stables, &c., were exhibited; among others, a remarkable model of a miner's dwelling, exhibited by the direction of the Prince Hohenlohe Works at Hohenlohe-hütte. Most of them, however, only repeated features with which the world was familiarized by the Paris Exhibition of 1867.

North-German exhibits in Class I.

In ground-plans and elevation drawings, Germany fully maintained at Amsterdam her reputation for technical educational development. In this branch of skilled industry, nine beautiful drawings representing a workman's

CLASS I.

Scandinavian
exhibits in
Class I.

colony at Borsig, and some designs for miner's hospitals exhibited by M. Scherbenning, Director of the Schorley Mines, both in Silesia, were specially admired.

The three Northern Kingdoms comprising Scandinavia were distinguished in Class I for the solidity, simplicity, and practicability of their designs. Denmark, indeed, received two gold medals in this class, both for plans of workmen's dwellings: the one exhibited by the Workman's Building Association, established at Copenhagen by the hands employed in the factories of Messrs. Burmiester and Wains; the other by the Managing Board of the *Classen fidei-commis*, also of Copenhagen. The special characteristics of these dwellings were, as has been said, solidity and simplicity; many of the walls being 50 centimètres thick, and two rooms and a very small kitchen being considered ample accommodation for one family. The kitchen of one Copenhagen plan is described as $1\frac{1}{2}$ by 2 mètres; dimensions that even excited the wonder of the Dutch, as being still smaller than the too scanty kitchen accommodation provided in some of their own cottages.

Some good asphalt roofing was exhibited from Denmark by Messrs. Ericson and Company of Copenhagen; and a preparation of paraffin oil for preserving timber, which obtained a bronze medal, deserves notice as an invention probably still capable of further improvement.

CLASS II.

CLASS II.—Furniture.

Furniture.

Class II. was very voluminous, and comprised almost every article of domestic use excepting clothing, food, and implements or their component parts. It was briefly styled "Furniture and Household Necessaries."

Dutch
exhibits.
Crockery.

Beginning with pots and pans, which has been somewhat disdainfully termed the backbone of the Exhibition, the Dutch Province of Friesland was strongly represented in earthenware; and some exhibits of Mr. A. Coopman's of Leeuwarden, attracted considerable attention. The quality was good and the price low; this exhibitor moreover responded to the demand made to give the wholesale as well as the retail price. It was on his exhibits, 12 florins the 100 pieces; thus putting ordinary jugs, cups, saucers, plates, &c., all round, at 12 cents. or about $2\frac{1}{2}d.$ a piece. Mr. W. T. Stam, of Sneek, in Friesland, exhibited similar articles at a cent the piece less for ready money,

on wholesale orders. Mr. A. Andree, of Bois-le-Duc, exhibited earthenware at the following low retail prices:—

CLASS II.
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Milk-pots	from 3	to 18	cents.
Roasting dishes	" 4	12	"
Hand basins	" 3	6	"
Black pans	" 2	4	"
Coffee-pots	..	..	" 4	8	"
Dishes	..	..	" 3	6	"
Milk jugs	..	..	" 2	6	"
Sieves	..	..	" 3	6	"
Small pots	..	..	at 1		"
Coloured tiles	..	..	" 1 $\frac{1}{2}$		"
Flower-pots	..	..	from 2 $\frac{1}{2}$	5	"
" saucers	..	..	at 2		"

(5 cents equal to 1*d.*)

A very complete collection of similar earthenware, porcelain, and glass was exhibited by the Brothers Sieberg, at Amsterdam, and priced as follows:—

			Fl. c.		Fl. c.
Tea-pots	..	..	0 17 $\frac{1}{2}$	to	0 35
Milk jugs	..	..	0 12 $\frac{1}{4}$		0 61
Filter coffee-pots	..	..	1 0		1 15
Butter-boats	..	..	0 25		0 35
Mustard-pots	..	..	0 12 $\frac{1}{2}$		
Pepper-pots	..	..	0 12 $\frac{1}{2}$		
Soap dishes	..	..	0 25	and	0 30
Breakfast plates	..	..	0 6		0 7
Dinner	"	..	0 9		
Sugar-basin	..	..	0 15		
Tea service (4 pieces)	..	..	0 80		
" with 12 cups and saucers	..	..	5 50		
Tea-cups with handles	..	..	0 10		
Egg cups	..	..	0 6		
Glass sugar-basin	..	..	0 40	and	0 50
" salt-cellar	..	..	0 10		
" tumblers	..	..	0 6	to	0 18
" wine glasses	..	..	0 20		0 45
" decanters	..	..	0 15		0 60
Porcelain tea-cups	..	..	0 22 $\frac{1}{2}$	and	0 25
" mustard-pot	..	..	0 80		
" breakfast plates (per dozen)	..	..	3 50		
" butter-boat	..	..	1 0		
" stand with 8 egg cups	..	..	2 80		
			&c. &c.		

One of the peculiarities of Dutch cottage pottery is the prevalence on it of mottoes serving to convey salutary, even if somewhat trite and sorrowful, reflections. Such words as "De Dood komt Zeker,"—Death must come,—are very commonly found at the bottom of cups and dishes; and can hardly tend to raise the spirits of those using them or

CLASS II.

conduce to conviviality at table. This kind of ornament is probably a remnant of the stern views of life, engendered by their wars of independence, the crockery literature of Holland retaining the rude unpolished character of former centuries, in striking contrast with the more modern and cheerful aphorisms imprinted on French or English earthenware.

Belgian exhibits.
Crockery.

Belgium was also richly represented in this branch of Class II; and a very complete display of earthenware, fully within the scope of the Exhibition, made by Messrs. Boch, Frères, of Keramis, near La Louvière, obtained for that house the highest recompense the jury could bestow. The moulds of this exhibit were good in design, and the articles themselves were distinguished by successful regular colouring and workmanship, combined with strength and absence of all coarseness or heaviness. The prices were as follows:—

		Fl. c.	Fl. c.
Coloured toilet services	..	10 35	to 17 25
„ coffee „	..	11 0	18 40
„ candlesticks	..	1 50	
„ tea-things, per piece	..	0 70	1 30
„ „ per half-dozen	..	6 0	
Yellow coffee-pots	..	0 52	1 50
„ beer jugs	..	0 69	2 7
„ milk jugs	..	0 17	1 44
„ filter coffee-pots	..	1 44	2 87
„ toilet service	..	4 90	
„ butter-boats	..	0 75	1 32
„ tobacco-box	..	1 27	2 0
Grey beer mug	..	0 80	2 10
„ mustard-pot	..	0 70	
„ match-box	..	0 52	
White sauce-spoon	..	0 25	
„ sugar-basin	..	0 32	0 38
„ coffee-pot	..	0 63	1 44
„ salt-cellar	..	0 14	0 25
„ soap-dish	..	0 44	
„ soup tureen	..	0 80	3 56
Fine white sugar-basin	..	0 9	0 12
„ coffee service	..	6 30	8 78
„ toilet „	..	5 40	7 0
Printed plates, per dozen	..	2 60	4 15
White „ „	..	1 55	2 7

French exhibits.
Crockery.

France displayed much pleasing porcelain and glass, but her exhibits in this branch were evidently selected more with a view to attracting the attention of the richer visitors, than a desire to meet the special aims of the promoters of the Exhibition.

Vienna porcelain has long enjoyed a large sale in the Netherlands, and was, consequently, adequately represented. Its good qualities are cheapness, lightness, and strength; its principal defect is great liability to chip.

CLASS II.

Austria.

Denmark maintained in crockery the solid qualities which distinguished it in Class I. Its pottery was characterized by cheapness and strength, but was mostly somewhat clumsy in appearance. In glass ware Denmark displayed more taste.

Denmark.

Heating was recompensed by the International Jury in Class I, and has, for that reason, been considered in that class in describing the British awards. Yet as the exhibits themselves were principally catalogued in Class II, it is more convenient in the case of foreign countries, where it is not necessary to follow closely the awards to respect the original classification.

Heating.

Commencing with the Netherlands,—it was natural that turf and peat should be largely represented among the exhibits of a country whose consumption of that fuel is fifty times as great as of coke and coal together, and exceeds 40,000,000 tons per annum. This is a very large average over a total population of 3,650,000 souls, and may be supposed to secure, to some extent, the poor of Holland against one great source of human suffering—insufficient warmth. The preparation of this fuel has long been a subject on which so much chemistry and skill have been expended in Holland, that it may be regarded as filling one of the first places among articles of domestic industry in that country. Rough-dried peats are seldom used except by the very poor inhabitants of the districts where they are cut; but complicated processes are resorted to for the introduction of new elements of heat and light-giving power, and of duration in consumption. Ordinary turfs are capable of holding 90 per cent. of water; if simply sundried, the turf therefore becomes light and porous. The simplest style of preparation in Holland is as follows:—the undried turf is put into a cylindric boiler and ground fine by circumvolving knives working like an Archimedes screw. At the bottom of the cylinder is a square box-press, into which the turf is worked and caked, and as it leaves this box, it is cut by machinery into the various sized bricks which find favour in the market, for heating and cooking, and for different stoves and furnaces. Thus prepared, it is known as “machinale turf,” but it is still in

Dutch peat.

CLASS II.
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its infancy as a prepared fuel. To perfect it still further, it is put into retorts and heated to the glowing point, as coke is prepared from coal; and a fuel, comparable to charcoal, and styled "turf coal" or carbonized turf, is thus obtained. Many good specimens of turf in its various stages were exhibited in the Netherlands Section of Class II; and among the French fuel exhibits appeared a remarkable specimen of paraffin derived from turf. Turf, like coal, contains many chemical substances, such as paraffin, coal-tar, creosote, &c. All these valuable substances are now lost, whereas, if they were carefully extracted, the turf itself might be sold at a lower price, though how far they could be removed from the fuel without injuring its caloric power and counteracting the economy effected, is an open question. There is, moreover, a spirit which can be distilled from turf, and which is of great value as a substitute for alcohol in certain chemical and scientific preparations. How far this can be productively utilized is also an interesting question. "Machinale turf" is sold at Amsterdam for $4\frac{1}{2}$ florins, or 7s. 6d. the 1,000 bricks of medium dimensions.

French peat.

The general outward excellence of the French turf exhibited at Amsterdam was much admired by Dutch connoisseurs. It is said to be prepared with great care, but on a different system from the Dutch. In the art of preparing turf so as to derive therefrom the greatest benefits as a fuel at the least cost, much advance remains probably to be made even in practically coalless countries like the Netherlands, where the question appears at first sight to have met with more attention than in coal countries like Belgium or Great Britain. Still, the possession of gold should not make us careless of silver, and it is to be hoped that competent persons will ere long devote more study to the turf question, as this fuel is probably capable of being made vastly more available for the poor in London and elsewhere, and has thus no remote nor unimportant bearing on the momentous theory of our coal exhaustion.

Stoves.

Second only in importance to the fuel itself, comes the mode of its consumption or place wherein it is burnt; and it will now be interesting to see how this question was represented by continental exhibits at Amsterdam.

The best means of combining heat with economy is a desideratum in all households to whatever social class they belong; but to the working-man and his family this

assumes an importance beyond all proportion to the sum spent upon it as compared to his total income. What was stated as a want in 1867 remains a want in 1869, viz., a stove that will warm the living room, cook the food of a family, and supply abundance of warm water at a consumption of fuel at the rate of one penny a-day. It is probable that gas, on improved principles and under perfect control, is the only heat-giver capable of rendering this service to humanity. Let us hope that some inventive genius will direct his energies to the discovery of some system of circulating hot water and gas at a cost easy of accurate regulation. Such an invention, providing heat, light, and hot water at 2*d.* a-day, would entitle its author to the highest rewards a Government could bestow.

The lead taken by France and Belgium at Paris in 1867 in the solution of this difficulty was fully maintained at Amsterdam in 1869, though they cannot be said to have made any actual advance. Many small iron stoves were exhibited by Dutch makers, at prices varying from 5 to 85 or 100 florins, and adapted to the use of coke, coal, or turf, but none of them struck the eye as improvements upon the continental models generally known. The small dimensions of the dwelling-rooms of the Dutch poorer classes, combined with the general objection to proper ventilation, permit of their being warmed at a trifling cost, and by minute stoves. For this reason, therefore, though many of the stoves themselves are very cheap, and an advance in economy, both in cost of purchase and consumption of fuel on what are used in Great Britain by the corresponding classes of society, they cannot conscientiously be recommended as any real improvement on the 40*s.* (Government contract price) "married soldier's stove," with its open fire and ventilating arrangement, as perfected by Captain Douglas Galton. This affords, perhaps, the best means of cottage-warming and cooking yet known for the man in receipt of good skilled labour wages. Below this, the want of a cheap stove still exists in all its gravity, a proof of how far off we still are from a millennium for the poorer class of working-men.

As might have been expected, the Dutch section of Class II was rich in kitchen hardware, laundry irons, heaters, wash-tubs, mangles, &c. On the merits of most of these articles, however, it is difficult to form a positive

Hardware: —
Irons.

CLASS II.

opinion in an exhibition, owing to the impossibility of testing the durable qualities which enter so largely into the just appreciation of their value. This is a difficulty, indeed, which presented itself more or less throughout all the jury work at Amsterdam, and which must present itself at any utilitarian exhibition. On articles of ornament or objects of art, on jewellery or statuary, even on carved furniture or rich carpets, it is easier to arrive at a just conclusion than on the durable qualities of the furniture and appliances of the poor man's home, on their health-giving and health-retaining qualities and the like. Considering, however, the nature of the opinion at which the Dutch public, as distinct from the jury, may be said to have arrived, there exist reasonable grounds for accepting their decision as of value in this case; for the Belgian and French manufactures were generally admitted to be as superior in quality as they were undoubtedly cheaper in price, than the productions of Netherlands industry in articles of ironmongery and hardware. To begin with hand-irons, notwithstanding the fact that Dutch medical men have universally condemned the use of box-irons as unhealthy for the ironer, who is made to inhale poisonous gases,—all the more poisonous from their being to some extent confined, many specimens of this class were exhibited. This was attributed to ignorance of the best means of heating the solid irons. Some small stoves for this purpose were exhibited, and one very simple one among them deserves notice. It was so constructed as to be available for cooking, or for heating six solid irons of different sizes, and professed a great economy of fuel. Its price was 17.33 florins, or about 1*l.* 9*s.*, and it was evidently popular amongst the Dutch visitors. It was exhibited by the Local Committee of Copenhagen, where these stoves are largely used. A French stove for this purpose, exhibited by Paul Chapel of Paris, designed so as to prevent the actual contact of the solid irons with the coal, which destroys their smoothness, also received a good deal of attention from the housewives of Amsterdam.

Tin-foil.

In tin-foil the Dutch held their own very well, and still continue to undersell Great Britain.

Steam washing establishments.

Washing was largely represented in the Dutch and Belgian sections of Class II, by models or plans of steam washing establishments for rich and poor. On the Continent

the wash-tub has been termed the "housewife's rack," and great efforts have been made in many towns to organize cheap washing associations, relieving the poor from perpetual soap-sud life, and giving them time to devote to other domestic avocations of a less laborious kind. In Holland, the success of steam-washing establishments has been very great; and no doubt the time will come when washing at home will be considered a process wasteful of both time and labour, and only suitable for the rich. The wash-tub, moreover, is one of the most powerful allies of the gin-palace and the beer-house; many a poor woman is compelled to have recourse to artificial stimulants to enable her to toil through her daily washing, and many a working-man on a general holiday, or when out of work, is driven from his home by the discomfort caused by his only room being converted into a reeking laundry. The children also of the poor will not fail to reap sanitary benefit from the partial banishment of the wash-tub and the permanent damp floors which it entailed.

Soaps, both hard and soft, were well represented in this section. Mr. J. G. Brunett, of Amsterdam, exhibited a hard, white household soap, very well spoken of by those who use it, at 19 cents, or a trifle under 4*d.* the lb. This soap showed no signs of excess of "buck," suds, or grease. M. Frère, of Gilly, near Charleroi, exhibited soft white soap at 50 francs the 100 kilos, and a hard, white "savon de ménage" at the same moderate price. The cheapest soap exhibited by this house was soft brown soap at 40 francs the 100 kilos (or 200 lbs). Many of the foreign soap exhibits were rendered very interesting from their being accompanied by a display of the ingredients and of their proportions as used in the manufacture of the article.

Soaps.

The British soaps met with high approval from foreign technical visitors.

In bedding the Dutch Section exhibited a substance as yet little known,—kapok. Of this valuable material for the stuffing of mattresses, bedding, &c., two houses had interesting exhibits, viz., Mr. F. G. Kratzenstein, of Amsterdam, who obtained a gold medal, and the Messrs. Klutgen, of Rotterdam. That this article will ultimately find general favour in Europe little doubt exists. The silky fibre is obtained from the seed gourd of the kapok tree, which grows wild in the Netherlands Indies, and only requires to

Bedding:—
Kapok.

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be plucked when very ripe. From this seed a valuable oil is obtained, and the refuse is excellent food for cattle. The supply of this material is practically inexhaustible and it can be imported for the cost of its collection in the jungles where it grows, plus the transport home. No cultivation is necessary. The most remarkable of its qualities are :—

1. Its immunity from attack by moths and vermin.
2. Its lightness.
3. Its elasticity and softness.
4. Its medium warmth.
5. Its cheapness.

Its price as compared with feathers is as follows for a double bed :—

Kapok	..	10 kilos. at 1·20 = 12 florins.
Feathers	..	16 kilos. at 2· = 32 florins.

And as compared with horsehair, for a double mattress—

Kapok	..	15 kilos. at 1·20 = 18 florins.
Horsehair	..	20 kilos. at 2· = 40 florins.

The beds being in each case equally well stuffed.

This shows a saving of, in the first instance, 20, and in the second 22 florins. The economy of the use of kapok is sufficiently remarkable to warrant a fair trial by the public of its other qualities. It is known as "kapok," "Edredon des Indes," and "Pflanzen-daunen."

Dutch cheap
bedding.

Cheap as is kapok compared with feathers and horsehair, yet cheaper bed-stuffings were exhibited by many Dutch houses. Messrs. Valleggia, of Amsterdam, sell seawrack at 1*d.* a lb., and prepared grass from the dunes at even less. This house also exhibited white blankets at from 3 florins 50 cents (5*s.* 10*d.*) upwards, and other bedding at similar moderate rates. France, Belgium, and Germany made little show in bedding, and to whatever cause it is to be attributed, these countries manifested evident disinclination to compete in downy substances with almost the only land in Europe where the eider duck is still indigenous.

As the old system of bed-places in the wall of a cottage room is now condemned on sanitary grounds in many European countries, though it will probably long continue to hold its own in unsophisticated rural districts, and especially in cold or temperate climates, some new system of bed arrangements seems a growing requirement for the poorer classes, where a large family can ill afford during the daytime the space occupied in their moderate-sized apart-

CLASS II.

Working-
man's cot.

ments by even small metallic beds. Not impossible, and at first sight it would appear that the plan might be recommended on sanitary grounds, this riddle may find its solution in the adoption or partial adoption for children, of cots or hammocks, removable by day and suspended at night by hooks to the beams over tables, dressers, or other available spaces. One merit arising from the invention and adoption of a working man's cot, apart from the economy of space both in the arrangement of the room itself, and in the number of rooms required, would be the freedom from contamination of the walls, that has been so much complained of in the dwellings of the very poor, and the enhanced security afforded against the inhalation of noxious substances from proximity to many cheap wall papers or damp walls. A greater freedom of circulation of air would also be obtained, while every room of the dwelling would be available for night as well as day accommodation. Benefit would indubitably accrue to the working-classes from the adaptation and practical execution of this idea by some well-known firm;—for example, Messrs. Peyton and Peyton would deserve well of humanity if they could contrive what, for want of a better term, I would call a descending cot, to be lowered out of the ceiling at pleasure and hoisted up into a prepared receptacle for it in the ceiling, when not required, by means of ropes and pulleys. The frame of the bed should, of course, be of metal; and it might, if desired, be provided with folding legs, so as to rest steadily on the floor in place of swinging. The space between the ceiling and flooring which is often used as a means of ventilating workmen's houses by the insertion of gratings or perforated bricks in the outer walls, would not be unfitted for this use, but rather the reverse; for the aperture caused by the bed when down at night would act as a perfect means of ventilation from the top of the room without draught, or the possibility of stopping it up, as the poor are always inclined to do when they detect a current of air or ventilating medium. In dwellings constructed with the intention of adopting the descending cot system, the space between ceiling and flooring might be made a few inches deeper than is now customary, so as to provide abundant room for the bedding, and even for its ventilation to a sufficient extent when hoisted up for the day. Another advantage of this system would be the additional deadening of the sound of footsteps, &c., caused by increased space

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Petroleum
lamps.

between ceiling and flooring, and interposition during the day of beds and bedding.

Excellent petroleum lamps, both for domestic and workshop use, were exhibited by Holland at moderate prices, and met with much favour from the public, notwithstanding the well-known danger of explosion inseparable from their use, which is now beginning to render them unpopular, even in America, where accidents of all kinds are, as a rule, so little dreaded.

Miners' lamps.

Belgium exhibited some miners' lamps, on the celebrated Davy principle, but of singularly simple and cheap construction. It is doubtful, however, whether a trifling economy, at risk of efficiency, in an article of this vital importance deserves to be encouraged; most people would probably prefer a lamp of, if possible, improved construction even if of higher price, and agree that this affords a good example of a class of article in which economy is not the first consideration even to the working-man.

Cheap furni-
ture.
Sweden.

In cheap chairs, tables, and other wooden furniture, Northern Europe took an undoubted lead at Amsterdam. The Society of Working-Men of Gottenburg exhibited marvels of workmanship, of solidity, and neatness at fabulously low prices that attracted general attention. Chairs at 1s. 8d., tables at 3s. and 4s., a chest of three drawers, 9s. 4d.; a shut-up bedstead, 12s. 6d.; and very solid garden seats at 5½d. Mr. N. P. Matsson, of Gothenburg, displayed a full-sized chest of drawers of white pine, veneered with polished oak, with good locks, for 1l.; a comfortable sofa-bed for 25s., and chairs of polished teak for 2s. 6d. a-piece.

Denmark.

After Sweden, Denmark ranked first in practical exhibits of this kind; and Messrs. Severin and Andreas Jensen, of Copenhagen, exhibited excellent strong cottage furniture at prices higher, indeed, than those of Gothenburg, but far below the continental average. Very superior furniture, at extremely moderate cost, was exhibited by August Knoblock, of Vienna; imitation walnut or rosewood chairs at 3 florins (5s.) a-piece, and tables, sofas, &c., at corresponding prices, being altogether an advance in economy on any article of even inferior quality obtainable in Great Britain.

Vienna.

Belgium.

Among the Belgian cheap furniture, of which there was not a very remarkable display, the article that attracted most attention was an exhibit by Messrs. Duyk, of Brussels,

of a cupboard 4 feet 6 inches high by 3 feet wide and one deep, into which could be packed the whole furniture of a bed-room—viz., bed, bedding, table, night-table, toilet-glass, four chairs, and four “chauf-pieds. This exhibit was a great curiosity, and every article belonging to it was well made, adapted to the working-man, and convenient for the frequent change of dwelling to which he is liable; but the price, 11*l.*, practically placed it beyond his means. One more article in this section, which was the subject of popular notice, was an iron garden table with umbrella-shaped awning rising from its centre, capable of being opened or furled, and hoisted to any height as circumstances might require. This, however, was a luxury, and clearly out of the scope of the Exhibition.

CLASS II.

There were good displays of wall papers, carpets, mattings, and stuffs for covering furniture from France, Belgium, and Germany. Little advance in cheapness, however, was observed in this class of goods, with an exception in favour of M. J. Leroy, of Rue Lafayette, Paris, on whom a gold medal was deservedly bestowed for the manufacture of a selection of articles, pleasing to the most fastidious taste, unobjectionable from a sanitary point of view, and produced at a price within the means of any hard-working artisan.

Wall papers,
&c.

In clocks no country could compete, at Amsterdam, with England and the United States for cheapness and excellence combined; and it will be seen from a glance at the following brief statistics of the clock importation into Great Britain in 1866 that the days of Dutch clocks are numbered,—the article, though still endeavouring to hold its own, being rapidly replaced among the wealthy by French industry, and among the poor by the cheap productions of the great Republic:—

Clocks.

			Value.	
			£	
Holland	..	..	39,055	9,523
France	..	..	80,177	190,321
United States	..	..	134,510	54,353
Other parts	..	..	612	1,682

An interesting collection of the productions of Algeria, mineral, agricultural, and industrial, exhibited in Class II by the French Minister for War and the Colonies, attracted a good deal of interest and attention, but contained nothing

A geria.

CLASS II.

of novelty to the practised exhibition eye, and was, in reality, little more than a small, though choice and varied, selection from the galleries of Oriental wares which dazzled with their exceeding brilliancy the crowds that flocked to Paris in 1867.

England.
Mr. G. Kent

The British exhibits in Class II were, with few exceptions, of a very practical and satisfactory character. The only gold medal they won, however, fell to the lot of the veteran exhibiting house of Mr. George Kent, 199, High Holborn, London, who exhibited articles for promoting domestic economy in the dairy and the kitchen, and for household work generally. The articles sold by this firm are very various, and comprise soaps, cucumber and vegetable slicers, mincing and paring-machines, egg-beaters and decapitators, portable mangles, butter presses, the admirable so-called champion carpet-sweeper, shoe-cleansing machines, knife-cleaners, strainers, milk savers, portable revolving driers, clothes wringers, mixing-machines, six-minute churns, jelly strainers, refrigerators, ice-safes, &c. &c. Most of the exhibits of this house came fully within the scope of the Amsterdam Exhibition, and were distinguished for cheapness and strength. Mr. Kent's wares are too well known in England to need description, and, thanks to his persevering attendance at foreign exhibitions (at Nice, Cologne, Paris, Amsterdam, not to mention New Zealand and Berar), his practical inventions and time and labour-saving machines, are rapidly attaining equal popularity abroad.

Silver medals
in Class II.

Ten British firms reaped silver medals in Class II. They were:—

Mr. William Cooke, of Grove Works, Leeds, for paper-hangings printed by machinery.

Mr. J. C. Davis, of 69, Leadenhall Street, London, for knife-cleaners. Mr. Davis also supplies mincing-machines, and opening-knives for tin cases.

Messrs. E. Martin and Sauter, of 48, Hatton Garden, London, for clocks, and instruments of precision.

Messrs. E. Moore and Co., of the Tyne Flint Glass Works, South Shields, for cheap glass. This firm was established in 1820, has a very large home demand for its manufactures, which are distinguished for cheapness, durability, and beauty of design, and exports very largely to every part of the world. Its collection of glass at Amsterdam was much admired by the Dutch, and it is to be hoped that the firm will reap in a practical shape advantage from their appreciation.

The Seth Thomas Clock Company, of 3, Leigh Street, Liverpool, for cheap clocks. This is an American firm, established at Thomaston, Connecticut. Mr. R. M. Marples, of Liverpool,

is sole agent for Great Britain and Ireland, and can furnish a day cottage time-piece for 6s., and an eight day cottage time-piece for 7s. 3d.

Messrs. Tritton and Hoare, of Stoke-upon-Trent, for cheap earthenware, much admired by the Dutch.

Messrs. Isaac Ricketts and Sons, of Hull;

Messrs. Edward James and Son, of Sutton Road, Plymouth;

The London Starch Company, of Dod Street, Limehouse, London; and,

Messrs. Parsons, Fletcher, and Co., of 22, Bread Street, London:

All for rice starch, which promises to become a new industry in Holland, since the Amsterdam Exhibition took it by the hand, and introduced it to the general appreciation of the Dutch people.

As the starch exhibits, not only British but Belgian and Dutch at the Amsterdam Exhibition, commanded a great deal of attention, and gave rise to much public discussion in the Netherlands; and as, moreover, this was a subject on which I did not deem myself competent to express an opinion on personal examination and inquiry, I availed myself of an offer of service from Mr. P. L. Simmonds, who had studied the subject technically and chemically, both at Amsterdam and at previous Exhibitions, and requested him to favour me with a brief paper, embodying the views and opinions of the experts whom the International Jury had consulted in this matter. This he kindly did, and I am in consequence indebted to him for the following clear and concise Report, which can hardly fail to be of interest to the several trades and branches of industry to whom starch is of more importance than is generally supposed by the uninitiated:—

Rice starch. 1

“Starch manufacture is now a most important industry in Europe and America. And its progress and improvements may be watched with interest, for it is chiefly within the last quarter of a century that the various chemical and manufacturing improvements have been made, by working under new processes and upon new materials. With the progress of population, the diffusion of wealth, and the enormous increase in our textile manufactures, a greater consumption has arisen.

Paper by Mr. Simmonds on the starches exhibited at Amsterdam.

“For a long time wheat starch was the only one that entered extensively into commerce; but in 1840 Mr. Orlando Jones patented a process which led to the introduction of rice starch, and other somewhat similar processes were adopted by Mr. Berger and Mr. Colman; and now the manufacture of starch from rice is the rule rather than

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the exception in England, there remaining scarcely one manufacturer who uses wheat. The cheap price and abundance of rice has led to its employment now very generally in France and Belgium; Italy, Prussia, and Austria, however, still cling to wheat.

"The high price of, and increasing demand for, wheat for food purposes in Europe, and the possibility of a return of the potato disease, or of that root being less extensively planted in Ireland and elsewhere, renders it probable that the price of starch will be maintained. It is, therefore, important to consider whether some non-edible root or substance may not be obtained, or some of the superior starch-producing plants of the tropics be cultivated to a sufficient extent to supply the wants of Europe. Rice and maize have been the latest articles resorted to, although attempts have been made to utilize the horse-chestnut and other substances.

"A few remarks on the different kinds of starch shown may not be out of place.

"*Wheat Starch.*—The wheats of rich warm countries contain more gluten and less starch than those of cold countries. The average of northern wheats bring about 70 per cent. of starch and 16 of gluten; the less gluten there is the more starch will of course be obtained. The difference between starch and fecula is that the latter will not form, or with great difficulty, the long crystalline needles into which the wheat and rice starches break up on drying. By improved processes adopted in France, the gluten is now separated and utilized for food purposes.

"*Rice Starch.*—The production of rice is so extensive in the East, and there is so much broken waste or refuse available in the markets at a low price, that the manufacturer can almost always purchase and store large quantities at his convenience. It may be kept a very long period in the rough. As much as 80 or 90 per cent. of starch has been obtained from some kinds of dry rice; but the average may be taken at 73, and there is about 13½ per cent. of water in the grain. The general appearance of the rice starch shown by British exhibitors was excellent; the crystals fine and the colour good; the same may be said of one or two of the Belgium exhibitors who compete creditably with England. It may incidentally be stated that the largest and best known British manufacturers, such as Messrs. J. and J. Colman, S. Berger, Orlando Jones,

Messrs. Wotherspoon, and Joseph Læscher, Son, and Co., &c., declined to exhibit.

“Maize Starch.”—The enormous production of Indian corn or maize in the United States, and the fact of its containing a less proportion of gluten than wheat, has led to its extensive utilization for starch manufacture, and also as a food product under the terms of maizena and corn flour. For the last-named purpose it is working its way largely into use in Europe; but it has not yet been able to contend successfully for laundry purposes with rice and wheat starch. The first cost and expense of manufacture must necessarily be less, but it does not form those fine crystals in drying which other starches do. As an alimentary product it received a silver medal.

“Potato Starch.”—All bulbous and tuberous roots contain a very large proportion of water, which is subject to considerable variation, and hence the amount of starch which a manufacturer can obtain from a given weight of potatoes is widely different. While the manufacture of wheaten or rice-starch may be carried on throughout the whole season, that of potatoes is confined to the period of the year commencing in October, and ending in February. The process by which potato starch is now so largely made on the Continent by improved machinery, is very perfect. Its hygroscopic properties are very great, even when sold in the form of dry starch. As a substitute in the shops for arrowroot it contains 18 per cent. of water, and if placed in a damp atmosphere, it would rapidly absorb double that amount of water. Fecula of potatoes is at present employed for a number of purposes; for the sizing of very fine papers; for the manufacture of starch, sugar, imitations of tapioca and sago; as an addition in the manufacture of vermicelli and semola; and for wasted starch.

“The applications of torrified starch, known under the name of dextrine or British gum, are very numerous. Among them may be cited the following—for stiffening and making up tulles, laces, gauzes, &c., and in fact for all kinds of cotton and linen tissues. Sizing or preparation of linen or cotton warps for weaving, especially of the finer articles. For thickening of the mordants used in printing on silk, woollen, and cotton. In calico printing for thickening both mordants and colours, when the latter are employed in what is called padding. Liquid gum for fixing on labels,

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—

adhesive postage and receipt stamps, envelopes, &c. For thickening colours for printing paper hangings. As mucilaginous baths for block-printing on silk, &c. There are some print works in Manchester which use as much as a ton a-day for stiffening fabrics.

“The exhibitors of starch were not very numerous, consisting of three Dutch manufacturers, six Belgian, and five English; one of the latter was, however, an American manufacturer. The starches shown by the Dutch were entirely wheat starches, whilst those shown from England and Belgium were nearly all made from rice. The starches were, under the Jury classification, shown in Class II; but as they appeared to have been only superficially examined by the Jurors of that extensive class in their recommendation for medals, the Central Jury referred them all for careful examination to Class IV, on which there were a great many chemists and scientific men fully competent to form an independent judgment. Some careful experiments were therefore made by them at the laboratory of Professor Gunning, the Government chemist and analyst for the town, as to the density, hygroscopic properties, tenacity, and character of the jelly formed by each of the starches exhibited; and upon the results of these experiments the awards were founded.

“As an article of diet, the most tenacious varieties of starch are preferred of account of the economy of employing an article of which a less quantity will suffice; and the same is true when applied to starching linen, provided the jelly be not deficient in clearness. When starch jelly is used for the purpose of starching or glazing linen or cotton goods, those varieties that are most transparent are understood to be preferred, if at the same time they possess the requisite tenacity. The jellies that are most tenacious are generally the least translucent.

“The exhibitors of starch were as follows:—

“*Dutch.*

“Gerrit Vis Albz., Zaandijk (honourable mention); A. J. Thys, Maastricht.

“Claas Honig and Son, Koognaa de Zaan.

“*Belgian.*

“B. Haussens and Sons, Trois Fontaines, Vilvorde (silver medal):

		Per 100 kilos.
		Francs.
Amidon royal (wheat starch) ..	..	75
Ditto, second quality ..	..	65
Potato fecula ..	..	36
Ditto, in packets of $\frac{1}{4}$ kilogramme ..	..	53
Royal rice starch ..	..	33 $\frac{1}{2}$
English national rice starch ..	..	28 $\frac{1}{4}$

"Th. Malengraux Hornu (Hainaut) potato fecula, fit for alimentary or industrial purposes, 36 francs the 100 kilogrammes.

"E. Remy and Co., Wygmael, near Louvain, royal rice starch, white or blued, in packets of 2 $\frac{1}{4}$ kilogrammes; 70 francs the 100 kilogrammes, and the same in smaller sized packets; 75 francs wholesale for quantities not less than 500 kilogrammes. Silver medal.

"Usine de Machelen, near Vilvorde (silver medal):

		Per 100 kilos.
		Francs.
Rice starch 1st quality ..	..	70
Ditto, 2nd ditto ..	..	50

"J. Servais and Co., Antwerp (silver medal):

		Per 100 kilos.
		Francs.
Rice starch, 1st quality ..	..	75
Ditto, 2nd ditto ..	..	65

"Ch. Vermiere von Geeteruyen, Hamme, near Termonde:

		Per 100 kilos.
		Dutch florins.
Wheat starch, 1st quality ..	..	31
Ditto, 2nd ditto ..	..	29

"English.

"Glencove Company, London. Duryea's maize starch, for laundry purposes.

"E. James and Sons, Plymouth. Starch for laundry purposes, white and blue.

"London Starch Company. Rice starches and finished starches for calico and linen printers, as well as paper-makers.

"Parsons, Fletcher, and Co., London. Rice starch.

"Isaac Ricketts and Sons, Hull. A fine collection of starches obtained from various plants, with microscopic representations of the forms of the granules of different kinds of starch. The wholesale price of English starch is about 34s. per cwt.

"France had also one or two exhibitors of potato starch, and its subsidiary products.

"The British exhibitors received a collective silver medal, and the Glencove Company, United States, a silver medal for maizena as food."

Little doubt exists that one of the results to Holland of the Amsterdam Exhibition will be the general introduc-

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tion and use of rice-starch. Considering the enormous quantities of rice annually imported into the Netherlands from their East Indian possessions, it is strange that the manufacture of starch from the damaged rice, of which little other use can be made, and of which a certain large percentage exists in every cargo, should not before now have become a national industry. Yet whatever the cause as regards the past, Holland must ere long become a large exporter of rice-starch, instead of being, as now, a small importer of wheat, potato, and other starches for domestic use.

Bronze medals
in Class II.

The bronze medals earned by Great Britain, in Class II, were bestowed upon the following six houses:—

Messrs. Chorley and Debenham, of Avenue Road, Camberwell, London, for floor-cloths.

Messrs. James Hartley and Co., of the Great Wear Glass Works, Sunderland, for glassware.

Messrs. G. B. Kent, and Co., of 11, Great Marlborough Street, London, for brushes of all kinds.

Mr. A. Lyon, of 32, Windmill Street, Finsbury, London, for time and labour-saving domestic articles, viz.: sausage-machines, bean-cutters, pea-shellors, &c. This last patent invention proved a great favourite with the Dutch.

Messrs. W. Taylor and Co., of Leith, for soap and candles. The paraffine candles manufactured by this firm are warranted not to bend in warm weather, nor in a temperature of 90 degrees Fahrenheit. Though dearer than stearine, paraffin candles have been calculated to give out 48 per cent. more light, a circumstance which reduces their practical cost by all but half, and brings them within the range of the poorer classes; their brilliant and cleanly qualities are well known.

The paraffine oils of this firm claim an extraordinarily high igniting point in relation to their respective gravities, a feature of the greatest importance in forming an estimate of their economical value, which generally suffers from their too dangerous nature.

Their crystal oil is warranted not to ignite under 135 degrees Fahrenheit; their paraffine oil under 145; and their "People's oil" under 170. These oils are produced from shale, by processes which Messrs. Taylor and Co. have patented.

Messrs. Simpson, Payne, and Co., of Millwall, London, for candles. The advertised wholesale prices of this firm are:

	s.	d.	
Pure paraffine candles ..	11	0	per doz. lbs.
Transparent mixed candles of pure paraffine and stearine ..	9	6	"
Pure stearine or sperm candles ..	9	3	"
Best composite candles ..	8	6	"
Second quality ditto ..	8	0	"
Cheap ditto ..	6	6	"
Family night lights ..	4	9	per doz. boxes.

They also supply grey sulphate of ammonia at 16*l*. 10*s*. per ton; and white sulphate of ammonia at 17*l*.

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This firm possesses special claim to favour for the leading part taken by them in the first processes for the aqueous decomposition and distillation of fatty matters in 1854; and, a year later, in processes for distilling glycerine, and in its original pure chemical manufacture, to which services rendered both to science and to humanity, Dr. Abbott Smith has done justice in his interesting little work entitled "Notes on Glycerine," reprinted from the "Technologist" in 1868.

Honourable mention by the International Jury was obtained by the following British firms in Class II:—

Honourable
mention in
Class II.

Mr. John Adams, of Victoria Park, Sheffield, for furniture and plate powder, polish and paste.

Messrs. Osborne, Bauer, and Cheeseman, of 19, Golden Square, London, for soap. The cheap soaps manufactured by this firm for the working classes are as follows:

	Per cwt.
Honey soap (in 1 lb. bars or tablets, 3, 4, 5, 6, to the lb.)	s.
Glycerine (ditto)	
Oatmeal (ditto)	
Glycerine and almond (ditto)	84
Oatmeal and glycerine	
Almond meal (ditto)	
Sunflower (ditto)	
Elderflower (ditto)	
Brown Windsor (ditto)	
Ditto (ditto)	112 to 190
Petroleum soap (for skin eruptions, in 1 lb. bars)	
Petrolin ditto	112
Sulphur ditto	

Messrs. Piesse and Lubin, of 2, New Bond Street, London, and Mitcham Road, Surrey, for soaps and perfumery.

Mr. John Anthony Pols, of 5, Pancras Lane, London, for refined oils. This house also exhibited cotton-seed, ground-nuts, and lubricating oils; foots from oil; carbonate of potash and vegetable charcoal, &c. It is distinguished for zeal and enterprise in the invention of improved processes for cleansing and crushing seed, and refining oils, either medicinal, vegetable or animal, and intended for heating, cooking, or burning, or for lubricating machinery. An analytical chemist of considerable repute, Mr. A. Phythian Turner, by whom the processes of Mr. Pols and their results have been carefully analyzed, strongly recommends his mustard, oil, castor oil, and cod-liver oil, as of the finest quality, and as tasteless to the greatest extent possible, without impairing their specific character. He also reports very favourably on Mr. Pols' system of flavouring them with the essential oil of bitter almonds, especially as the oil for this purpose has had the hydrocyanic acid previously separated from it. One remarkable proof of the value of Mr. Pols' processes is the fact of his oils and

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cotton-seed cakes commanding a considerable advance upon the ordinary market prices.

Messrs. Wilson, Turner, and Co., of Burdett Road, Limehouse, London, for nickel silver, electro-plated spoons, forks, &c.

Diplômes
d'Excellence
in Class II.

The six diplomas of excellence, ranking with gold medals, obtained by British houses in Class II, were :—

Messrs. Napoleon Price and Co., of Bond Street, London, for perfumery.

Mr. Thomas Spencer, of 32, Euston Square, London, for domestic purifying filters. This house makes filters at 10s. a-piece (wholesale price), which will purify from 6 to 7 gallons of water daily; this is 25 per cent. less than the published price list. The patent enjoyed by this house specifies the filtering or purifying agent to be magnetic protoxide of iron, in chemical combination with a small portion of carbon; it dates from 1858. Both Houses of Parliament, and the Peninsula and Oriental Steam Ship Company use these filters, as I am informed.

Messrs. F. C. Calvert and Co., of Gibbon Street, Bradford, Manchester, for carbolic acid, for medicinal, agricultural, and disinfecting purposes. Dr. W. A. Miller, F.R.S., of King's College, reports that with 1 per cent. of Calvert's carbolic acid disinfecting powder he kept blood perfectly free from decomposition for a month: a stronger proof of its power could hardly be given. In addition to its powerful antiseptic qualities, it must be remembered that, according to the high authority of Mr. W. Crookes, F.R.S., the disinfecting substance is a clean white powder, devoid of any unpleasant smell, has no irritating action on the fingers, is easily brushed off anything on which it may accidentally fall, is not deliquescent in the slightest degree, and has for its basis an absolutely inert, insoluble, and non-poisonous body. It will thus seem to be pre-eminently adapted for domestic purposes. Calvert's carbolic acid disinfecting powder was strongly recommended by the Royal Cattle Plague Commissioners in 1866, as superior to many others, and was used with good effect in subduing the too celebrated outbreak of typhoid fever at Terling, in 1868; yet it is well to bear in mind that this disinfectant only suspends the decomposition of animal or vegetable accumulations of filth or drainage, which should never have been allowed to accumulate—and which, so surely as they are allowed to accumulate, will inevitably produce typhoid results; and an official Report on its use at Terling concludes with the following clear and practical remark, which all who have occasion to employ it should bear in mind: "However powerful may have been the action of carbolic acid at Terling, its use as a disinfectant can only be looked upon as a temporary expedient for holding pestilence in check, until the contemplated and much-needed sanitary improvements have been carried into effect."

Messrs. Peyton and Peyton, of Bordesley Works, Birmingham, for iron and brass bedsteads. The value of these articles as preventive of vermin and conducive to cleanliness in the poor

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man's home, can hardly be exaggerated; and manufacturers should consider it a duty not only to bring them within the range of the poorest in the land, but to supply them cheaper than any wooden bedsteads can be obtained. Properly constructed they are stronger and cheaper, and take up less room than wooden bedsteads. They are doubtless destined to universal use among rich and poor alike, so soon as all the existing wooden bedsteads in the world have done descending in society, by means of auctions and the pawnbroker, and been finally consumed as fuel, the only purpose to which they can be hygienically applied. Messrs. Peyton exhibited at Amsterdam metallic bedsteads at 14s., which should find favour abroad as a marked advance in economy on continental goods of this description; and a bedstead at 18s. 4d., after paying 5 per cent. import duty, and 30 per cent. discount to retailers, was, when delivered in Holland, generally admitted a superior article to a Prussian metallic bed costing 5l.

Messrs. Powell and Bishop, of Hanley, Staffordshire, for china and stoneware. The wholesale prices of this firm are moderate, and the articles first class. They are very large employers of labour.

Mr. Eugene Rimmel, of 98, Strand, 128, Regent Street, and 24, Cornhill, London, for perfumery.

Extraordinary mentions were conferred on seven British houses in Class II. They were:—

Mentions Extraordinaires in Class II.

Messrs. Condry, Bollman, and Co., of Battersea, London, for their fluid for purifying water, and general disinfecting purposes. This is a most important article, and one of equal value to every class of society, while, at the same time, within the reach of all. The price of a gallon of strong disinfecting fluid, made by mixing one-part of Condry's fluid with 200 or 300 parts of water, does not exceed 1d.

Messrs. Condry also supply cheap filters for 2 francs, which, with the aid of a minute quantity of their fluid, will purify from 10 to 20 gallons of water daily. The filtering medium can be renewed for a few centimes. These filters are equally available for brightening turbid water, and are said to have the effect of removing lead from water containing that dangerous metal. This last is a very important point, where good water is not easily procurable, as in some parts of Holland, and these articles should be in daily domestic use on a greater or smaller scale, according to the water consumption of the household.

Messrs. Crichley, Wilde, and Co., of Cannon Street, Birmingham, for umbrella-stands. This firm also produces superior stove-grates, fenders, and general ornamental casting.

Messrs. J. C. and S. Field, of Lambeth Marsh, London, for candles. This firm claims, among other inventions, that of the plaited-wick for candles, and has obtained prizes at the Exhibitions of London, 1851 and 1862; Dublin, 1865; York, 1866; and Paris, 1867: for supplying the brightest quality and the cheapest kinds of wax, stearine, sperm, composite and paraffine candles, night-lights, and soaps.

CLASS II.

Messrs. Mander, Brothers, of 17, Gracechurch Street, London, and of Wolverhampton, for resins and varnish. (Established in 1803.)

The Silicated Carbon Filter Company, of Church Road, Battersea, London, for filters. The claims of this firm to eminence are great and varied. The Commission appointed by the "Lancet" to inquire into the subject of drinking-water and filtration, adopted a very severe test for the purpose of proving the capabilities of a filter for removing organic matter from water, viz., the use of water mixed with milk, which represents, chemically, all the organic impurities usually found in water. From this test the Silicated Carbon Filter emerged triumphant, the milk being effectually eliminated from the water. The Company supply pocket filters at 2s. 6d.; filters for the bedroom at 5s.; for the kitchen at 14s. 6d.; and for the dining-room at 30s. They also supply what are really more valuable, as tapping and purifying the poisoned stream before it effects an entry into the house, main-service filters at 6l. 6s. and upwards, besides high-pressure filters, refrigerative filters, ship filters, &c.

This firm claim for themselves the merit of standing alone in supplying filters which do not render the water flat and insipid, but impart carbonic acid instead of withdrawing it from the water.

The following is stated as the effect of the Silicated Carbon Filter upon Thames water obtained near Battersea Bridge at high water:—

	Unfiltered.	Filtered.
	Grains.	Grains.
Total solid contents of an Imperial gallon ..	33½	8·7
Hardness, as determined by Clark's test ..	Degrees. 13	Degrees. 6
Earthy carbonates deposited by boiling ..	Grains. 11	None
Organic matter contained .	3·8	Grains. 0·6

"The unfiltered was of a greenish yellow colour, and during evaporation gave out a most offensive odour, the residue being a dark brown mass of organic and saline impurities. When passed once through a Silicated Carbon Filter it became perfectly colourless, sweet, and drinkable; during evaporation not the slightest odour was perceptible, and the residue was quite white, and consisted of little more than chloride of sodium (common salt)."

Mr. Henry Stephens, of 171, Aldersgate Street, London, for ink. To Mr. Stephens belongs the honour of standing in the front rank of those who have applied chemistry to atramental fluids. His black, blue, and red writing inks, his copy and marking inks, are justly celebrated and widely used.

Messrs. Shaw and Fisher, of 43, Suffolk Road, Sheffield, for electro table services.

To two British houses only, in Class II, was the highest award of all—"Diplôme d'Honneur"—given, viz.: to—

Price's Patent Candle Company, of London;

CLASS II.

"Diplôme
d'Honneur"
in Class II.

And to—

Young's Paraffine Company, of Glasgow, both for candles. The firm of Messrs. Price supplies night-lights, soaps, oils, glycerine, paraffine, &c., as well as every description of candle. It obtained a gold medal at Paris, in 1867, and is too widely and well known to call for more remark. Price's solidified glycerine soap, may, however, be mentioned as a great step in advance in the application of chemistry to every day life.

The second of these distinguished firms, Young's Paraffine Light and Mineral Oil Company (Limited), sell hard paraffine candles at 1s. per lb.; sulphate of ammonia at 16l. 10s. per ton; and burning and mineral oils at 1s. 7d. the gallon and 16l. the ton, respectively. These are wholesale prices, on which a further reduction is made of 2½ per cent. for cash payments.

CLASS III.—*Clothing.*

CLASS III.

Clothing.

Class III was devoted to clothing, and included every article connected therewith, or entering into its manufacture. Cottons, linens, woollen and mixed stuffs, garments of all kinds, waterproofs, leathers, hats, caps, thumbstalls, boots, buttons, pins, needles, purses, scissors, rings, bracelets, and other cheap trinkets; and, oddly enough, tobacco-boxes. Comprising so great a variety of articles, it was not surprising that Class III ranked second in number of exhibits among the classes at Amsterdam.

A glance at this section was enough to prove that times had changed since Holland held an important place in the cloth market of the world. The decline of the Dutch cloth manufacture since the seventeenth century, when Steel Street, in Amsterdam, where the cloth merchants congregated, was one of the sights of Europe, inspiring Rembrandt with the subject of one of his most celebrated pictures, "The Steel Masters," is attributed by the Dutch themselves to an early Treaty made by the first Napoleon with Spain, one Article of which permitted the exportation from Spain into France of merino sheep, which, crossed with the French breeds, produced the best results in wool. About the same time, during the reign of George III, the merino sheep was likewise introduced into England; but there it was found that, though the wool did not deteriorate, the meat met with little favour in the market, and ulti-

Dutch cloth
exhibits.

CLASS III.

mately farmers contented themselves, as in France, with judicious crossings with the Southdown and other breeds. The farmers of the Netherlands do not appear to have realized the importance of this subject until about thirty years ago, when English sheep with longer and finer wool were introduced for crossing purposes with good effect. From that date the Dutch wool market began to revive, though it will probably never recover its lost pre-eminence. Woollen manufactures of all kinds are now largely on the increase in the Netherlands.

Notwithstanding this improving state of things, Dutch woollen exhibits at Amsterdam were by no means what they ought to have been, or might reasonably have been expected to be. In successful dyeing, indeed, they held their own; but in the manufactured article, that from the earliest period to the present day has continued to be of primary importance, as forming the principal part of the clothing of mankind in the temperate zone, Holland was but feebly represented in her own Exhibition. In fact, in cloth the honour of the Netherlands may be said to have depended on the efforts of one house, Messrs. Crahay and Co., of Maastricht, who exhibited a fair show of coloured cloths and buckskins at the following prices:—

			Fl. c.	Fl. c.	
Brown duffle	..	..	4 40	and 5 50	per 7 palms.
Blue	..	..	5 0		..
Buckskin	..	..	3 30		..
Grey Molton	..	..	3 30		..
Brown reps	..	..	3 30		..
Black cloth	..	..	3 85		..
Red flannel	..	..	2 0		..
Blue	..	..	1 40	and 1 90	..
Light blue military cloth	..	..	4 15		..
Dark blue	..	..	4 35		..

Belgian cloth
exhibits.

Belgium was as strongly, as Holland was weakly, represented in cloth manufactures at Amsterdam, and most of her exhibits in this branch of industry possessed the special merit of coming strictly within the scope of the Exhibition, being remarkable for cheapness and solidity. A gold medal was awarded to Messrs. H. Rolin, Fils, and Co., of St. Nicholas, for an assortment of their stuffs; and a collection of articles exhibited by M. Wynandy-Venster, of Dison, attracted particular attention for their general excellence, taking into consideration the low price at which they were ticketed:—

			Mètres.	Fr. c.		CLASS III.
38,000	Coteline	..	..	2.40 at 6 70	the mètre.	
50,000	"	..	..	"	7 10.	"
60,000	"	..	..	"	8 45	"
55,000	"	..	..	"	8 25	"
45,000	"	..	..	"	7 55	"
40,000	"	..	..	"	6 90	"
35,000	"	..	..	"	6 45	"
25,000	"	..	..	"	6 0	"
55,000	Satin	..	..	"	6 90	"
48,000	"	..	..	"	6 45	"
37,000	"	..	..	"	5 60	"
44,000	"	..	..	"	6 0	"
40,000	"	..	..	"	5 35	"

North German
cloth exhibits.

The North German Bund made little show in articles of this class except in buckskins, of which M. Christian Sauer, of Hersfeld, Hessen, exhibited some good qualities; and in trouser stuffs, of which some popular cheap sorts varying from 2 to 3 thalers a-piece were displayed by Messrs. Aug. Zchille and Müller, of Grossenhaim. Some of the Saxon thick woollen cloths should likewise be mentioned favourably among the exhibits of this class.

"Wald-wol."

An interesting exhibit in this section was one made by the Schmidtsche "forest wool" ("Wald-wol") manufactory at Remda in Thuringia. This article, which is of a rusty colour and smells strongly of turpentine, resembles flannel in texture, and is made in different thicknesses. It is said to be woven from the fresh needles of the fir-trees of the Thuringian and Black Forests. It is considered a specific against gout and rheumatism, and is very much used by the poor and middle-classes in the Netherlands, where many leading physicians regard it with favour, and where there are agencies for its sale in every considerable village. The process of its manufacture was first perfected, after many years of study and labour, by Herr Josephus Weiss, who established a factory of it in Silesia as much as twenty years ago; but so great were the prejudices against which he had to contend, that it is only quite of late years that the faculty on the Continent have deigned to examine into its merits, and give it a fair trial.

Other articles besides clothing are produced from the fir-needles by the manufactory at Remda; a spirit is distilled from them which is said to be very efficacious in friction; and an oil obtained from the same source is much recommended for soaking the flannels, &c., in, previous to their application to the rheumatic parts in acute cases.

CLASS III.

Lozenges are also made of which the chemical basis is said to be derived from the same abundant source of health and wealth—the pine forest. As this subject is of special interest in connection with the latest practice of some of our leading medical men of sending consumptive patients to pine woods, whereby the curative, or at least health-giving qualities of the raw material of which these goods are made, would seem to be recognized either on scientific principles or on practical experience, I annex a price list of the different articles procurable from the Schmidtsche Forest Woolware Factory at Remda :—

				Fl. c.
Knitting thread, 4 skeins	..	..	..	3 0
Wadding, per packet	..	..	..	0 50
" small	..	..	..	0 25
Twilled flannel, per ell	..	..	..	2 0
Flannel, per ell	..	..	..	1 30
Twilling " "	..	..	..	0 80
Sleeves, per pair	..	..	..	1 40
Socks, No. 1	..	..	..	1 20
" No. 2	..	..	..	1 35
Men's stockings, No. 1	..	..	..	2 0
" No. 2	..	..	..	2 30
Ladies' stockings, No. 1	..	..	..	1 50
" No. 2	..	..	..	1 75
Knee cap, No. 1	..	..	..	1 40
" No. 2	..	..	..	1 60
Soles for shoes, No. 1	..	..	..	0 50
" No. 2	..	..	..	0 55
" No. 3	..	..	..	0 60
Muffatees ..	..	..	..	0 60
Half-socks ..	..	..	..	1 0
Blankets ..	..	..	..	10 0
Pillows ..	..	..	..	3 0
Mattresses (according to their size).				
Fir needles, per 5 oz.	..	..	..	0 30
Back protector	..	..	..	2 0
Chest " "	..	..	..	2 0
Bands ..	..	..	..	2 0
Scarfs, No. 1	..	..	..	0 50
" No. 2	..	..	..	0 60
Chest protector (ladies')	..	..	..	1 30
Caps ..	..	..	..	1 0
Under caps, No. 1	..	..	..	0 70
" No. 2	..	..	..	0 80
Under waistcoat (ladies'), No. 1	..	..	..	4 0
" " No. 2	..	..	..	4 50
" (men's)	..	..	3 60 to	4 50
" " "	..	..	4 75	5 75
Drawers ..	..	..	4 0	4 55
" ..	..	..	4 75	5 75

These articles will all wash.

	c.	c.	Fl. c.
Oil, per half, whole, or double bottle, at	35	70 and 1	30
Extract, per half and whole bottle	..	75	1 50
Elixir, per bottle	0 75
Pomatum	0 60
Spirit	0 50
Syrup	0 60
Soap, per piece	0 25
Bonbons, per box	0 30

CLASS III.

The Austrian and French cloth exhibits possessed great beauty of colour, and were of fine quality, though for the most part somewhat dear in price, and thus beyond the pale of the Exhibition. One remarkable exception to this general rule was rewarded by a well-merited gold medal bestowed upon M. E. Couchon, of Périgueux (Dordogne), who exhibited some strong woollen stuffs at 92 cents the mètre.

Austrian and
French cloth
exhibits.

In linens and cottons generally, Holland in some measure made up for its deficiency in cloth exhibits; yet here again Belgium had an undoubted precedence, while North Germany, with the Elberfeldt industry, was meagrely represented. Notwithstanding the fact that Dutch flax cannot compete with the flax of Flanders or Great Britain in whiteness, it retains its ancient popularity on the Continent for durability, and specially for superiority in design of damasks. In linens Holland may be said, on the whole, to have been respectably represented, though little more; while in cottons and calicoes the absence of many of the largest manufacturing houses of Overijssel and Haarlem deprived the collection of completeness as a national display. To this fact, among others, must be attributed the paucity of awards given in this class to Dutch exhibitors as compared with some foreign countries, which constituted so honourable and novel a feature in the Amsterdam Exhibition as compared with previous occasions of a similar kind, and notably with Paris in 1867, where nearly one-half of the total recompenses were bestowed on French houses. A little reflection will show that this neglect of the Netherlands to be adequately represented at their own Exhibition, which would at first sight appear so remarkable, considering their large fabrication of linen and cotton goods for export to Java, &c., is probably to be traced to this very cause; their principal custom for these goods is in Asia, not in Europe, and perhaps on the whole they are wise in not caring to exhibit side by side with other countries, and

Linens and
cottons. —

CLASS III.

invite invidious comparisons between goods destined for the Eastern market, and those intended for the more fastidious taste of European communities. Whether this suggestion be just or unjust, it is one they have themselves provoked in the necessity for seeking obscure motives for their allowing foreigners, and especially the neighbours of whom they are so jealous,—Belgians,—to carry off the palm in the branch of industry now under review.

Leather

Of leather, worked and plain, one of the most difficult articles to judge by the eye, the touch, or any test short of actual wear and tear, there was a handsome show from several countries.

Made-up
clothing,
Dutch.

In made-up articles of clothing, upper and under, for the working-man, there was no lack in the Amsterdam Exhibition; indeed this may be said to be one of the departments most fully represented from every country. One of the most complete collections of underclothing in the Netherlands section was that of the Evangelical-Lutheran Sisterhood of the Hague. It was composed as follows :—

				Fl. c.
Layette (complete)	..	..	..	24 0
Linen aprons	..	..	..	0 90
Coloured aprons	..	..	..	0 75
Jackets	..	..	..	2 25
Red pocket handkerchiefs	..	..	..	0 45
Coloured dusters	..	..	..	0 25
Linen shifts	..	..	..	2 5
„ shirts	..	..	..	2 20
White neckerchiefs	..	..	..	0 32
Long drawers	..	..	..	1 60
Short „	..	..	..	1 50
Waistcoats	..	..	..	1 95
Girls' shifts	..	..	..	0 95
Boys' shirts	..	..	..	0 95
Sheets	..	..	..	2 10
Small sheets	..	..	..	1 35
Petticoats	..	..	..	2 25
&c., &c.				

Another collection of similar articles, priced somewhat lower, apparently of equally good material, but not quite such fine workmanship, was comprised in the exhibits of Mr. F. L. Van Deth, of Dort. The prices were :—

			Fl. c.	Fl. c.
Children's vests	..	..	..	0 35
Girls'	..	..	0 55½	to 0 90
Women's	.. large	..	..	1 55
"	.. small	..	..	1 15
Boys'	..	..	0 75	1 10
Men's	.. large	..	..	2 0
"	.. small	..	..	1 55
Boys' drawers	..	..	..	1 0
Men's	..	..	..	1 65
Nightcaps	..	..	0 22½	35 0

The cloth clothing for the working-man which Holland exhibited at Amsterdam was not so much characterized by cheapness as by solidity and good workmanship. Among the most interesting objects in this section were the complete dresses for a labourer and his wife exhibited by Baron Mackay Van Ophemert. They were composed and priced as follows :—

WORKMAN'S DRESS.

				Fl. c.
Cloth blouse	..	..	..	4 80
Waistcoat	..	..	..	1 50
Trousers	..	..	..	2 90
Jersey	..	..	..	1 95
Drawers	..	..	..	1 40
Shirt ..	..	..	..	0 80
Neckcloth	..	..	..	0 25
Stockings	..	..	..	1 0
Shoes..	..	..	..	2 20
Cap ..	..	..	..	0 60
Pocket-handkerchief	..	..	..	0 35
Total	..	..	..	17 75

DRESS FOR WORKMAN'S WIFE.

				Fl. c.
Short gown	..	..	..	1 80
Upper petticoat..	..	..	..	2 90
Under "	..	..	..	2 85
Jersey	..	..	..	1 20
Shift ..	..	..	..	0 80
Neckerchief	..	..	..	0 37½
Apron	..	..	..	0 72½
Stockings	..	..	..	0 90
Shoes..	..	..	..	1 40
Cap ..	..	..	..	0 27½
Pocket	..	..	..	0 17½
Handkerchief	..	..	..	0 20
Total ..	..	..	..	13 60

The Brothers Offermans of Bois-le-Duc also exhibited complete suits of clothing (consisting of coat, vest, trousers,

CLASS III. shirt hose, neck-tie) of different qualities, but all good and solid of their kind, at 18.42, 15.82, 9.85, and 7.98 florins each.

Belgian. Several Belgian houses displayed collections of made-up clothes, most of them, however, of too high a price to be available for the working-man, and more adapted to the wear of his employer. Of the few Belgian clothing firms that did come within the scope of the Exhibition in this respect, the prices did not transpire; and comparison with the productions of other countries is thus rendered impossible.

North-German. The made-up clothing exhibited by the North German Bund was principally composed of woollen articles of good quality, and very moderate in price.

Austro-Hungarian. Linen clothing was well and tastefully represented in the Austro-Hungarian section, which was indeed one of the most pleasing and characteristic portions of the Exhibition. In colouring, no other could compare with it, and the articles exhibited were of a singularly *bond fide* character, and mostly within the prescribed utilitarian conditions. Thus Messrs. Hönig, of Vienna, showed excellent linen shirts at 2s. 6d. a-piece, and Messrs. Lichtner, also of Vienna, displayed other ready-made underclothing at equally moderate price.

Wooden haberdashery. A novel feature among the Austrian exhibits in this class was their *wooden haberdashery*, neck-ties, collars, cuffs, shirt-fronts, &c., being made of beautiful white wood shavings. Hats and caps are likewise made of this material. The exhibitor of these articles was Carl Viol, of Vienna; and from the rapidity with which they disappeared, as they were bought up for keepsakes, it is probable that he, for one, was quite content with the results of the Amsterdam Exhibition. The Austrian articles generally, indeed, met with much appreciation from the Dutch, who are greatly interested in everything that concerns that empire, from the fact of their being such large holders of its national obligations,

"La Belle Jardinière." The first place among French ready-made clothing was incontestably filled by the Parisian house "La Belle Jardinière," established under the management of Messrs. Bessand. According to the advertisements of this Parisian Moses and Son, "*la spécialité de cette maison est qu'on y entre tout nu et qu'on en sort tout habillé.*" This house professes to sell from 4,000*l.* to 6,000*l.* worth of goods

daily. Each article it displayed was remarkable for having appended to it an elaborate tariff of the prices of its component parts, and of the profit anticipated on its sale. Thus a pair of fine cloth trousers gave the following explanation of its total cost :—

CLASS III.

			Fr. c.
Stuff	..	..	14 41
Silk	..	..	0 98
Lining	..	..	0 48
Coarse linen	..	..	0 7
Buttons	..	..	0 15
Buckle	..	..	0 4
Ribbon	..	..	0 45
Cutting out	..	..	0 50
Wages	..	..	4 0
Profit	..	..	3 17 = 16 per cent.
Total			24 25

One item in this tariff is of interest, as being the only one probably that is strictly reliable. I refer to the last but one—wages, which are here seen avowedly to represent a trifling fraction, under one-sixth, or about 16 per cent. on the cost price of the manufactured article. This speaks volumes for the effect of our European civilization upon the wage classes of society, if compared with the custom still prevailing in India and other Oriental countries, of estimating the labour in many trades at the same price as the raw material. For example, a native, requiring a dozen pocket-handkerchiefs or a silver bangle, would buy the raw material, the cambric or the silver, in the neighbouring bazaar, and call into his verandah such labour as was needed to complete its manufacture. In such cases the silver-workers are paid in silver for the weight of their workmanship, and the durzees (or tailors) would receive in wages the value of the material.

“La Belle Jardinière” received a well deserved gold medal, for its handsome display of goods combined with this innovation in price lists, which rendered it “plus royaliste que le roi” in responding to one of the most important of the avowed objects of the Amsterdam Exhibition, viz., procuring an analysis of the price of production of articles of a first necessity for daily use.

The wooden sole figures largely in Dutch workingmen’s boots, and the English invention of the division of the wooden sole into several pieces corresponding with the moveable portions of the sole of the foot when walking,

Boots and
shoes.
Holland.

CLASS III.

is largely copied. In this section Mr. P. J. H. de Ruyter, of Utrecht, displayed wooden-soled boots and shoes at the prices given below :—

	Fl. c.
Sabots or garden shoes, with wooden and leather soles	3 0
Ditto, with gutta-percha soles.. .. .	3 25
Ditto, with wooden soles	2 0
Ditto, for over-shoes	1 75
Women's ditto	1 75
Ditto, for over-shoes.. .. .	1 40
Children's ditto	1 0
Girls' ditto	1 10

Mr. J. H. de Lang also exhibited a collection of solid boots and shoes at the following low prices :—

	Wholesale.	Retail.
	Fl. c.	Fl. c.
Mud-boots (high)	5 0	6 0
Ditto (anle high)	3 5	4 0
Calf-skin ditto, with double soles and nails	4 0	4 50
Ditto, single soles	3 0	3 50
Ditto shoes	1 75	2 0
Ditto boys' shoes	1 25	1 50
Ditto children's ditto	1 0	1 20

Belgium.

One of the most interesting boot and shoe collections from Belgium was that furnished by the Co-operative Society at Cureghem. Among these were strong boots for iron-workers at 4·50 florins, for miners at 5 florins, and for carters at 4·12 florins. All these appeared to be of excellent manufacture, and represent a decided advance in economical construction.

Austria.

The boots and shoes exhibited in the Austrian section were more remarkable for beautiful workmanship than extreme cheapness.

France.

In "chaussures," as in all articles of clothing, France exhibited a rich variety, and obtained no less than four gold medals. These exhibitors were great Paris houses, well-known to the shoe-making world since 1867, and call for no special comment.

Denmark.

Denmark had three exhibitors of boots and shoes. Some of these, made of pig's leather, attracted a good share of general attention.

Miscellaneous exhibits.

It is not my intention to describe the miscellaneous articles exhibited in this class which always form so popular

a portion of every exhibition. Cheap finery of various kinds found ready purchasers, and the Amsterdam utilitarian Exhibition of 1869 furnished no exception to the rule laid down by previous experience, which numbers such stalls among the most attractive to the bulk of human nature out of which exhibition crowds are made.

CLASS III.

Two British firms received gold medals in Class III, viz. :—

British exhibits in Class III.

Messrs. W. Bliss and Son, of Chipping Norton, Oxford, for woollen fabrics; and,

Messrs. Ermen and Engels, of Manchester, for sewing cotton.

It was on the former of these firms, Messrs. Bliss and Son, that the Emperor of the French was prepared to bestow in 1867 the new order of reward, if Her Majesty's Commissioners could have overcome the difficulties which beset its acceptance by British subjects; and the circumstances on which their claim to that distinction was founded, afford a sufficiently striking illustration of the inseparable nature of the interests of the workgiver and of the workman to warrant their being quoted in connection with an Exhibition whose main object was to contribute to the general knowledge of this fact. To their honour then let it be again recorded that the firm of Messrs. Bliss and Son was founded in 1757, and that in 1867 it could be proved that during the 110 years that it had flourished, no dispute had ever occurred between the masters and the 500 hands they had continually employed; that during that time none of the workmen had joined Trade-unions, nor had unions had any effect on their wages. There had been no combination; no hands had been allowed to go to the workhouse—families had worked for three generations—the duration of life had been above the average; workmen had saved money and bought life insurances; children had never been employed under 13, and married women employed had not been required to work before breakfast in the winter. Schools, reading-rooms, lectures, concerts, cricket, football, had been liberally promoted. That a gold medal should fall to such a firm, and that their tweeds and cloths should be both cheap and excellent, and not suffer in repute from Continental competition cannot excite surprise; but the fact is none the less a source of international gratification, conducive, let us hope, to the promotion, the continuance, and the adoption by others, of the most remunerative and the only Christian treatment of workpeople by their employers.

Messrs. Bliss.

CLASS III.

Messrs. Ermen
and Engels.

The second British gold medallist in Class III, Messrs. Ermen and Engels of Manchester cannot boast of such an ancient lineage as Messrs. Bliss of Oxford, having been established at Eccles and Pendlebury in 1837. They employ, however, 1,000 hands, and produce immense quantities of most superior cottons and threads, both for the home and export trades.

Silver medals
in Class III.

The following nine British houses received silver medals in Class III:—

Thomas Ainsworth, of Cleator Mills, Whitehaven, for linen-thread for sewing-machines, tailors, &c. This house also exhibited linen tapes and towels. Some of the merits claimed by these threads are, that they are cable-laid and back-twisted, are round and smooth, and have these advantages over silk for sewing leather:—1st. Stronger, size for size, than silk. 2ndly. More durable, resisting wet and exposure to the weather better than silk. 3rdly. Make closer work, because not elastic like silk. 4thly. Cheaper, because there is a greater length in a given weight, size for size, than in silk.

Messrs. Anderson, Abbott, and Anderson, of Dod Street, Limehouse, London, for india-rubber and oil-skin clothing. This firm produces:—

	<i>s.</i>	<i>d.</i>
An oil-skin jacket at	3	8
„ trousers	2	8
„ sou'-wester hat	0	10
Or, complete waterproof suit ..	7	2

$7\frac{1}{2}$ per cent. discount is allowed on wholesale orders, with a further reduction of $2\frac{1}{2}$ per cent. for cash payments.

Messrs. Cow, Hill, and Co., of 46 and 47, Cheapside, London, for patent india-rubber sponges, glove-cleaners, printers' rollers, serrated mats, &c.

Messrs. Day, Watkinson, and Co., of Huddersfield, for Bedford cord.

Messrs. Robert Jeffrey and Sons, of Brunswick Street, Glasgow, for linen and cotton twilling, ticking, and sheeting.

Messrs. W. and C. Kesselmeyer, of 1, Peter Street, Manchester, for cotton-velvets, velveteens, moleskin, Genoa cords, &c. This house claims credit as the original inventor and patentee of velveteen, a material which strength, durability, warmth, and good outward appearance has justly rendered an especial favourite with the working classes.

Messrs. McIntyre, Hogg, and Co., of 122, Brunswick Street, Glasgow, for shirts and woollens.

Messrs. Thomson and Dodds, of the Priest Royd Mills, Huddersfield, for fancy trouserings.

The North British Rubber Company (Limited), of Edinburgh, of 4, Cannon Street, London, and of 8, Spring Gardens, Manchester, for india-rubber shoes, clothing, and waterproof goods, machine-beltting, hose, washers, &c.

Seven bronze medals were conferred upon British exhibitors in Class III, they were:—

CLASS III.

Bronze medals
in Class III.

Messrs. J. Buckley and Son, of Leeds, for hats and caps.

Messrs. D. Mc Arthur and Co., of 26, Bothwell Street, Glasgow, for linen sets. This house also exhibited embroidered muslins, ties, robes, &c.; embroidered shirts, crape collars, and lace goods.

Messrs. Charles McDonald and Co., of 60, Ingram Street, Glasgow, for shawls.

The Paisley Co-operative Manufacturing Society, established at Paisley, for cheap shawls.

Messrs. B. Vickerman and Son, of St. George's Square, Huddersfield, for woollen and mixed cloths, &c.

Messrs. Wadkin and King, of Chepstow Street Mills, Manchester, for cotton-twines. This firm claims the credit of being the first makers of twine from cotton, an invention which they perfected about twenty years ago. These twines are now in general use for fishing-nets, &c., being more durable and economical than those made from hemp. This exhibit was of great importance to the Dutch.

Messrs. H. Monteith and Co., of 11, St. George's Square, Glasgow, for corahs, bandanas, and faucy pocket-handkerchiefs.

"Diplômes d'Honneur," which ranked above gold medals were awarded in Class III to the two following distinguished British houses:—

"Diplômes
d'Honneur."

Sir Elkanah Armitage and Sons, of 48, Mosley Street, Manchester, for cotton-sail, canvas, cotton-duck for manufacturing into india-rubber belting, American leather-cloth, &c. This great house, which employs an average of 2,000 hands, was established in 1829, and is one of the great cotton-spinning firms of our cotton-spinning country. Their manufactures may be described as embracing every description of cloth made of yarns dyed in the skein or hank. There is a large and growing demand for them on the Continent, where their excellence is fully appreciated, and obtained for them a gold medal at Paris, in 1867. Their goods are not actually the cheapest made, but from their durability and superior qualities they are great favourites with the working-man, and largely consumed by the class for whom the Amsterdam Exhibition was specially intended.

Sir Elkanah
Armitage.

The second house thus rewarded was that of—

Mr. Robert Thatcher, of Oldham, Lancashire, for cotton-yarn produced from waste, cotton-twines for netting, cotton-banding for machinery, and the manufactured goods for which the yarn is used. This house has been established about fifty years, and never exhibited at any previous Exhibition. The departure from its practice in favour of the Working-Men's Exhibition at Amsterdam, must therefore be regarded as stimulated less by the hope of individual gain, than by the generous desire of entering into friendly rivalry and competition with other manufacturers in the supply of articles of a quality and price calculated to render them a boon to civilization and society at large.

Mr. R.
Thatcher.

CLASS III.

“Mentions
honourables” in
Class III.

Four British firms received honourable mention in Class III. They were—

Messrs. Armdale and Co., of 257, Argyle Street, Glasgow, for Scotch hats and caps.

Messrs. R. and T. Grimstone and Co., of Clifford Mills, near Tadcaster, for shoe-threads, shop and netting twines.

Messrs. Howden and Wade, of Millshaw Mills, near Leeds, for pilot cloth.

Messrs. William McLaren, Sons, and Co., of 5, South Hanover Street, Glasgow, for cambrics and tweeds. Shawls and woollens were also exhibited by this house.

All these houses complied with the request for information as to wholesale prices, but as these prices are constantly fluctuating with the price of the raw material, no quotations can be of practical utility.

“Diplômes
d'excellence”
in Class III.

Five diplomas of excellence, ranking with gold medals, were conferred on British exhibitors in Class III for articles not strictly coming within the declared scope of the Exhibition. Their recipients were :—

Messrs. Brough, Nicholson, and Co., of Leek, Staffordshire, for silk.

Messrs. Hitchcock, Williams, and Co., of St. Paul's Churchyard, London, for waterproof mantles. This firm exhibited a 7s. 11d. waterproof cloak, in great favour among the working-classes in Great Britain; and there can be no doubt that this article entitled them to compete within the scope of the Exhibition. Theirs, however, is one of the many cases referred to in the official letter of the President of the Exhibition, forwarding to the Home Minister for publication in the “Gazette” the ultimate awards of the Central Jury. In this letter it is stated that the awards must be regarded as having reference to the general character of exhibits, and that being thrown *hors concours* as regards the special objects of the Exhibition, by no means implies that the firm concerned exhibited nothing for the use of the working-classes. Some firms deemed this ruling hard—and it had, indeed, a harsh effect as applied to this particular exhibit—but such cases of isolated individual hardship must occur where it is essential to adopt a general code of procedure applicable to all classes and to every country. *Contretemps* of this description are a necessary evil to which every Exhibition is liable, and constitute, in regard to Exhibitions, a portion of the alloy which it is impossible to eliminate from all human undertakings, however sterling and genuine.

Messrs. G. Possett and Co., of City Road Mill, Derby, for elastic boot-webs.

Messrs. W. Salmond and Sons, of Arbroath, Forfarshire, for sail-cloth.

Messrs. Morton and Sons, of Kidderminster, for carpets.

“Mentions
extraordi-
naires” in
Class III.

The five following British houses received extraordinary mention in Class III :—

Messrs. Waldemar Lund and Co., of 60, Chandos Street, Strand, London, for ivory and gold studs.

Mr. Samuel Wills Norman, of Grosvenor Gardens, S.W., and 116, Westminster Bridge Road, London, for boots and shoes.

These are for wear in a very low temperature, and are porous, not waterproof.

Mr. Edwin Wilkes, of the Promenade, Cheltenham, for portmantaus, remarkable for lightness, strength, and convenience, some being air-tight and others water-tight. This firm takes off 40 per cent. discount on large orders.

Messrs. Henderson and Co., of Durham, for carpets.

Messrs. J. Wilkinson, and Son, of St. Helen's Mills, Hunslet, Leeds, for carpets.

If many of the British exhibitors in Class III failed to obtain awards to which they deemed themselves entitled from the well-known excellence of their wares and manufactures, not a few of them have only themselves to thank for the result in not having taken the pains to be adequately represented at Amsterdam. Exhibitors should bear in mind that an Exhibition, to succeed, must be made attractive to the eye, and that the mere display of a small sample of their goods, such as they would send round for the inspection of retail dealers, even though such specimen may, strictly speaking, be sufficient to enable the examining Jury to arrive at a just decision on its merits, cannot be held to constitute a perfect claim to the highest order of award if compared with more important exhibits, of perhaps equal intrinsic merit, from other countries. A Jury in great part composed of jealous Frenchmen, Belgians, Germans, &c., requires to be satisfied and convinced of the rank the exhibitor holds among his rivals, as well as of the actual excellence of his often very limited exhibit, and considers, *cæteris paribus*, that the firm which is well represented by handsome cases, is more worthy of a great recompense than the house that has gone to little trouble or expense, taken no interest in the undertaking, and displayed no public spirit of laudable national emulation or honest pride in its own representation. Even as a soldier who appears untidy on parade is an unpleasant object for the eye of his commanding officer to dwell on: so an exhibitor who appears in callous attire at an international industrial tournament, is an eye-sore to the jury and the public, and cannot expect his foreign judges (for to every country represented the bulk of the jury is foreign), to take for granted, or be anxious to be convinced, that a shabby exterior is a necessary criterion of internal merit. In the

Importance to exhibitors of being well represented.

CLASS III.

particular instance now under consideration, I have no hesitation in attributing many of the superior awards obtained by France and Belgium to this cause, which contributed not a little to the facility with which British interests were outvoted and disposed of in the International Jury at Amsterdam. It is to be hoped that the lesson, there somewhat rudely taught, may be turned to future account by British exhibitors remembering that a respectable show of goods on a scale commensurate with their importance is the first element of success at international exhibitions, of success to the exhibitor himself, and to the exhibition as a whole; further, that those the British manufacturer ventures to compete with when he sends his goods abroad are, as a rule, by no means ignorant of the advantage of display, or wanting in good taste to enhance the general effect of their endeavours. How far such causes contributed to the non-satisfaction of the claims of the unsuccessful British exhibitors in Class III, it is needless to inquire in detail, but no doubt some, if not many, will be able to lay to their hearts the flattering unctious that, had they striven, they would have reaped their reward.

These remarks apply of course chiefly to great manufacturers, of whom there were many in Class III, at Amsterdam, who were represented by most insignificant exhibits. Great Manchester houses serve their country better by abstaining from exhibiting at all, if they do not deem it worth their while to exhibit well, and by staying at home where they are known and appreciated, rather than by sending a few square feet or yards of their manufactures to render them an object of derision to the Jury, and of no interest to visitors at large. With inventions the case is different; and though the advantage of a showy exterior should never be neglected, even at exhibitions of a utilitarian character, exhibits of this description are able to stand more exclusively on their merits than ordinary manufactured goods.

CLASS IV.

CLASS IV.—*Food.**Food.*

“Wie der mensch iszt so ist er” was the motto of Class IV, which was devoted to food, and included all kinds of edible, agricultural, and industrial productions and preparations. Flours of all kinds, oils, vinegar, and other condiments,

coffee, tea, chicory, and all sorts of sweets. It also included tobacco and snuff; both of which are chewed largely in Holland. It is perhaps worthy of incidental remark that Holland is the only country besides China in which the habit of taking snuff with a small spoon has come under my personal observation; and it would not be without interest to know whether this is a remnant of a once universal custom, or whether it has been imported into that country by sailors and other roving Dutchmen, who from time immemorial have visited the East in such numbers. Class IV also contained collections of dried and salted meats, extracts of meat, milk powder, canned and bottled vegetables, fruits, &c. Drinks of all kinds, beers, spirits, wines, and, lastly, every variety of preserved and smoked fish, which forms so large a staple of the people's food in this amphibious country.

Meat consumption in Holland.

The food question in Holland is one of importance not only to Netherlands but also to ourselves, who are at present such large consumers of what under the existing régime of the Dutch people is considered superfluity, and is thus available for foreign markets. To prove this it is only necessary to draw attention to the following brief column of statistics which may be taken as a sufficiently accurate, though of course only an approximate Table of the principle food exports of Holland during 1869, of which Great Britain has taken, roughly speaking, all the live stock and meat, and by far the greater part of the other articles:—

240,040	sheep and lambs.
98,240	horned cattle.
32,304,000	lbs. of butter.
34,400,000	„ cheese.
4,400,000	„ mutton and pork.
132,000,000	„ sugar.
24,000,000	„ rice.

Now this large supply of meat, which we draw from Holland principally for our London market, would, if divided among the adult males of the Dutch population, be little more than enough to provide them with an additional weekly dinner of meat, so that our retention of this source of feeding the metropolis is dependent on a very precarious tenure—namely, the absence of increased meat consumption by the bulk of the Dutch people themselves; and a very small increase in such meat consumption (which is actually nil among the poorest classes), would be sufficient

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to cut it off entirely. From this point of view it is evidently of great interest to inquire how the Dutch are fed at present, and what chance exists of the extension of meat diet in that country.

Herrings and
salmon.

In the first rank among substitutes for meat in Holland stands fish—both sea and river, fresh and salt. The herring fisheries along the coast, for participating in which, until a few years ago, a Government license was required, are now open to every coasting-craft without exception, and it is asserted that the herring banks are being over-fished, and that the supply is consequently falling off. The same source of danger to the fish supply has been detected at the mouths and estuaries of the Rhine, where salmon-netting has hitherto been pursued in the most reckless manner, the annual close time being limited to *one month*, and no weekly slaps being prescribed by law. To such an extent, indeed, has the salmon been over-fished by the Dutch, as to render necessary an appeal by the upper proprietors or riverain states—Prussia, Hesse, Baden, and Switzerland—to those doctrines of international law which deny the right of a country, into whose hands geographical accident has thrown the command of resources extending beyond its own national limits, to use or abuse such resources to the detriment of its neighbours. After much tedious and protracted negotiation, this appeal has at length been listened to, and a Treaty was signed the other day at Mannheim between the parties concerned, laying down a code of laws for the preservation of the Rhine salmon, and prescribing a fairer annual close time. The weekly slap, after many vain attempts of the upper States to induce Holland to accept it, had finally to be abandoned in order to allow of the Treaty being signed before the expiration of 1869, on which some international obligations of Switzerland towards the German powers were said to be dependent.

Still, salmon is mainly an article of export, or of consumption by the rich alone in Holland, and is thus of less real importance to the country, nationally, than the millions of herrings which take the place of meat in the food supply of the peasantry, and it is sincerely to be hoped, both for the Dutch and for ourselves, that some means may be found ere long to again limit the coast-fishing to the number of nets the banks can carry without injury to the future supply. It should be known, however, that this is a subject which

has not yet received a sufficient share of public attention in this country.

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Of the consumption of fresh-water fish in Holland, no statistics are procurable, and it is therefore impossible to decide whether the supply is threatened with exhaustion; it is probable, however, that it is not, or at any rate not to the same extent as salt-water fish, for the fresh waters are private property, and jealously preserved, which the sea is not. Eels, pike, roach, perch, &c., are, however, in daily use as food among large classes of the population, and the seasons are but little regarded in connection with their consumption.

Fresh-water fish.

But apart from the question of the probable decrease of certain food sources in the Netherlands, there exists a growing demand for supplying the people with more meat. A comparison has been attempted between the meat consumption of the masses in Holland and in the neighbouring Kingdom of Belgium, and roughly and imperfectly as the inquiry has been made, no doubt exists as to the Belgian consuming the most meat. Some Dutch political economists, forgetting the mineral resources of their neighbour, and the absence of fish, which lie doubtless at the bottom of this consumption of a more expensive diet, have apparently mistaken the cause for the effect, arguing that the consumption of meat has made the Belgian richer than the Dutchman: whereas the truth evidently is that increased prosperity has been the forerunner of more meat. To console themselves for their deficiency in the matter of meat diet, the Dutch next undertook a series of inquiries on the average of human life, and the progress of diseases among the meat-eating and non-meat-eating classes of the population of the Netherlands. How accurately this was conducted I cannot say, but it was publicly announced, at the time, that the results were by no means unfavourable to abstinence from meat. The highest and most unfavourable figures are stated to have occurred among those who, leading irregular lives, sometimes well off and sometimes in want, are in the habit, after long abstinence from meat, of eating perhaps little else for a week or so at a time. Whether or no these inquiries were accurately conducted, and the results deserve to be regarded as reliable, for they were prosecuted chiefly by private hand, and not under the authority of Government, a growing demand for meat diet exists in Holland, notwithstanding the increase of that

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article in price, and sooner or later this demand will infallibly begin to tell on our meat importations.

Grains.

Of grains and flours a rich collection was exhibited at Amsterdam. Messrs. Bouwman, of Rotterdam, exhibited a case containing nearly 250 different kinds. Of their comparative merits it is of course impossible to speak without extending this Report beyond its legitimate limits. English seed is very popular in Holland, and many of the best exhibits in grain and flour were especially advertised as originally grown from English seed. In all these cases the grain was remarkably heavy and full. Peas, beans, canary, &c., also abounded in the Dutch section. The size attained in some specimens of the horse-bean attracted the attention of foreign visitors, and many fruitless inquiries were made as to how the result was obtained. Oats were not well represented. A prejudice exists in Holland against the use of this meal for food, and the little grown is exclusively used for horses and fattening cattle.

Tobacco.

Of tobacco there were plentiful exhibits both in the leaf and in every stage of preparation. The Dutch tobacco was pronounced of good quality; better than the ordinary German, but inferior to the best French kinds.

Hops.

Of hops there were none exhibited of Dutch growth, the plant being little cultivated in the Netherlands, and an article of importation from abroad. In the Belgian exhibits they were well represented, though the quality of some cases challenged the adverse criticism of brewers and other experts.

Dried fruits.

In dried fruits the Belgian were held to surpass the Dutch collections.

M. Ville's
agricultural
exhibits.

Among the French agricultural exhibits were some wheat sheaves and bundles of hemp grown on a very limited extent of poor ground at Vincennes and exhibited by the well-known agriculturalist Mr. George Ville, as a specimen of what can be done by artificial and natural manures. A small book accompanied and explained these interesting exhibits. It was entitled "*Conférences Agricoles faites au Champ d'Expérience de Vincennes*" and being in the trade is readily procurable by any who do not disdain to inquire whether we have anything to learn from French science in the art of farming and of adding by the application of various phosphates to the weight of corn, length of stalk, and other elements of rural wealth.

M. Ville also exhibited specimens of the artificial and

natural manures of the results of which he exhibited the fruits ; but the Jury rightly declining to judge objects, the merits of which are only practically tested by the ensuing crop, a test for which an Exhibition Jury cannot wait, these interesting and valuable exhibits were adjudged *hors concours*, and left to the enterprising agriculturists to test for themselves. In Holland, where high farming is daily gaining ground, this test will not be long in being applied.

Although these remarks have been called forth by a French exhibit, I should say that we have more to learn in manures, especially probably in liquified farm yard manures, from the Dutch than from the French ; and in my opinion the husbandry of this country has not yet received the study it deserves.

Several other countries sent specimens of cereals, but none of them appeared to call for special notice or remark, unless indeed it be that the bulk of the exhibitors evidently piqued themselves upon the extreme whiteness of their flour, in seeming ignorance of the well-known fact, that perfect purity is alone attainable by the elimination of the coloured particles nearest the husks of the grain which chemists have declared to contain the largest per-centage of pure albumen.

In maccaronis and vermicellis, France was pre-Maccaroni.
eminent. First class collections were displayed by the great houses of Messrs. J. Brun and Co., of Lyons, and of Veuve Majuin et Fils, of Claremont-Terrent. This last is a veteran exhibiting house, and boasts no less than sixteen gold medals for previous exhibiting campaigns. It was established in 1820, and is worked by steam representing 135 horse-power.

In fancy biscuits, France was equally in advance ofBiscuits.
other Continental nations, though England carried off the palm in all the plainer sorts.

As might have been expected in a country where, as aDrinks.
rule, there is,

“ Water, water, everywhere,
And not a drop to drink,”

Owing to the pollution of canals and the absence of sweet springs, potations of all kinds and strengths were largely and well represented: to the dissatisfaction of many, who would fain have obtained their exclusion on the ground of the impropriety of giving them a diploma as recognized articles of necessity for the working-man.

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Though not strong enough to obtain their total exclusion, the temperance influence succeeded in getting wines, spirits, and even medicinal cordials adjudged *hors concours*, a decision of some injustice to the working-man, to whom it is undeniably a matter of importance to know where to get a little generous stimulant in cases of ague or more serious illness, without exposing himself to the risk of imbibing liquid fire or absolutely poisonous decoctions. This decision had, indeed, something positively quaint about it, when contrasted with the liberal adjudging of gold medals, &c., within the scope of the exhibition, and consequently for the working-man, to snuffs, tobacco, &c., in all the stages of subtle preparation of which that popular though noxious narcotic is capable.

Beer.

Although strong drinks were thus under an official cloud on this occasion, beer was far from being included in this category; and the high awards conferred upon the exhibits of the Great Royal Netherlands Brewery of Amsterdam, and upon Messrs. Heineken and Co., who resorted to a novel and practical method of advertisement, inserting in the catalogue a printed cheque bearing their official stamp, and worded, "Good for a glass of beer on presentation at the refreshment stall," afforded ample evidence of the very proper preference which those who ruled on this occasion accorded to the use of sound and wholesome ale over intoxicating and spirituous drinks, as a suitable article of consumption for the labourer and artisan.

Another Dutch brewery demanding notice is that of Messrs. Lans and Son of the Hague, whose barley beer at one penny the three pints, is for its price unsurpassed in Holland.

Breda beer and Maastricht ale, both justly celebrated on the Continent, and exported even to Germany, the land *par excellence* of beer, were duly represented and appreciated.

In this connection it remains to mention, in terms of well-merited praise, the exhibits of the successors of the great Vienna house of Anton Dreher, of the Royal Bavarian Breweries, of the great Strasburg establishment of Messrs. Wagner, and of the far-famed Lager beer and Koppel beer of Messrs. Ahrens and Co., of Berlin. All these beers have their merits, and combine innocence of manufacture with moderation in price.

Taken as a whole, the continental collections in Class IV, though covering a great deal of ground, presented little variety of appearance. France, Italy, and Germany, all had their rows of preserved fruits and vegetables; lines of oddly-shaped bottles, containing their well-known wines and liqueurs, but little or nothing calling for remark on the ground of its originality. Altogether I should be inclined to say that of all the classes into which the Amsterdam Exhibition was divided, Class IV exercised least influence on its visitors, from the absolute impossibility of forming, by inspection, a judgment on any other quality of its exhibits than their price; and this, taken by itself, without the most perfect analyses and application of tests, to discover for instance their retention of freshness and flavour under various conditions of temperature and keeping, might almost, for all practical purposes, have been written in Runic characters, or in Cuneiform hieroglyphics. Of all the countries represented, Denmark was, perhaps, most worthy of attentive study, on account of the novelty of many of her smoked and dried provisions, as well as for the perfect appreciation of the character of the Exhibition which rendered the Danish Court in general a model of what the whole Exhibition should have been, but unhappily was not.

CLASS IV.
General
character of
Class IV.

The British exhibits in Class IV were of a very high order of excellence, and universally admired. The highest award they gained was a "Diplôme d'Honneur" conferred upon the renowned firm of Messrs. Allsopp and Son, of Burton-on-Trent, for pale ale—a cosmopolitan drink, the consumption of which is rapidly becoming universal.

British
exhibits in
Class IV.
Messrs. All-
sopp.

The second award in order of rank, a gold medal, fell to Messrs. W. J. Coleman and Co., of 13, St. Mary-at-Hill, London, for Liebig's extract of meat. This house also exhibited Harding's cattle food, mustard, vinegar, and isinglas. Their extract of meat is manufactured on the establishment of Robert Tooth, Esq., of Sydney, Australia, and is used by the Government of India. According to the high authority of the "Lancet," it compares as follows with other similar preparation:—

Extract of
meat.

CLASS IV.

	Tooth's : Coleman and Co.	Ramornie.	Liebig's Extract of Meat Co.
	Grains. 17·06	Grains. 17·83	Grains. 18·56
Water			
Organic alcoholic extractive matter, containing crea- tine, creatinine, inosic acid, &c.	51·28	47·93	45·43
Organic extractive matter insoluble in alcohol ..	*10·57	*12·92	*13·93
Mineral matter	21·09	21·32	22·08
	100·00	100·00	100·00
*Containing gelatine ..	7·87	9·63	8·56
„ albumen	0·19	0·62	0·29

Purchasers are warned to beware of having extract made from wild cattle in South America substituted for Tooth's Liebig's extract, which is made in Australia from cattle of English breeds, for this is said to be one secret of its success.

“Diplômes
d'excellence.”

“Diplômes d'excellence,” ranking with gold medals, were conferred on the two following British houses, whose exhibits were deemed beyond the scope of the Exhibition :—

Messrs. Batty and Co., of 15 and 16, the Pavement, Finsbury, and
8, Finsbury Place, London, for pickles; and,
Messrs. Peter Rappott and Co., of 367A, Strand, for gin and
liqueurs.

The first of these firms, Messrs. Batty and Co., stand so high as to render comment on their goods superfluous. I annex, however, an interesting Memorandum on the pickle trade, by which their exhibits at Amsterdam were accompanied.

Memorandum
on the pickle
trade.

“About fifty years since a great impulse was given to the pickle and provision trade in England by the abolition of the duty on salt, which had previously been 36*l.* per ton, and which was reduced to 30*s.* per ton. A very increased consumption of all salted and cured provisions immediately ensued; and a very increased supply of vegetables for pickles, in the preparation of which a large quantity of salt is used, resulted. This increased demand continued steadily for twenty years or more, till at length the English market gardeners were unable to keep pace with the demands of the trade, and prices rose so high as

CLASS IV.

to threaten a reduction of the consumption to its former limits. Under these circumstances Messrs. Batty, accompanied by Mr. Blackwell, of Soho Square, made a voyage to Rotterdam for the purpose of opening the supply of cauliflowers, gherkins, onions, walnuts, and other vegetables in brine from Holland. Great difficulties were encountered in opening this trade, the chief of which arose from the high price of salt in the Netherlands, which would have precluded a profitable business, the Government being unwilling to permit the use of salt in bond, and moreover very suspicious of what uses might be made of it. A specimen of cauliflower was prepared by Messrs. Batty, and after a very lengthened period, during which it was proposed to resort to Belgium in case of refusal, the scruples were removed, the use of salt in bond was granted, and a large trade has ensued, and millions of pounds have passed into the hands of Dutch agriculturists. This trade has been jealously watched by both French and Germans; but the low freight for these bulky heavy goods has at present prevented any other country competing successfully with Holland. Messrs. Batty alone use, at a low estimate, about six hogsheads of vegetables a month, and one house in London a still larger quantity; and it appears, as English tastes are becoming more and more universal, still larger results may be expected."

Messrs. Batty and Co. further exhibited preserved fruits, jams, jellies, marmalade, and preserved fish. Amongst these there was a novelty demanding notice, viz., strawberries preserved in syrup made from potatoes; the price is about one-half of what they can be supplied at if preserved in any other manner.

Three silver medals awarded next demand attention. They were bestowed upon—

Silver medals
in Class IV.

Messrs. Tomlin, Rendell, and Co., the London Agents for the Glencove Company, of Long Island, New York, for maizena.

Messrs. John Aitcheson, and Co., of Edinburgh, for Scotch ales; and,

Messrs. George Borwick and Sons, of 24, Chiswell Street, London, for baking-powder, by means of which it is said that puddings can be made without eggs, bread without yeast, and pastry without much butter.

Bronze medals fell to—

Bronze medals
in Class IV.

The Banbury Brewery Company, for brown stout.

Mr. John Green, of 12, Graham's Terrace, Ridley Road, Kings-

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land, London, for sheet gelatine. This house has a large and increasing Dutch connection, and French gelatine is annually becoming less and less imported into Holland.

Mr. John Mc Call, of 137, Houndsditch, London, for preserved provisions; and,

Mr. Thomas Amey, of the Rushes Farm, Petersfield, Hants, for desiccated and condensed milk.

"Mentions extraordinaires."

"Mentions extraordinaires," without the scope of the Exhibition, were awarded by the International Jury to the seven following houses:—

Mr. Patrick Anld, of Walbrook House, Walbrook, London, for Australian wines.

Mr. J. Gilbert, of Pusey Vale, South Australia, also for Australian wines.

Messrs. Henley and Son, of Joiner Street, Tooley Street, London, for cider.

Messrs. Huntley and Palmer, of Reading and London, for biscuits. This firm employs upwards of 1,500 hands.

Mr. John Mackay, of 119, George Street, Edinburgh, for quint-essences.

Mr. J. T. Morton, of 107, 108, and 109, Leadenhall Street, London, and of Aberdeen, for preserved provisions; and

Messrs. Peek, Frean, and Co., of London, for their biscuits, which command an almost universal sale in Holland.

Cooking-stoves.

In cooking-stoves Great Britain made on the whole a creditable display, and took undoubted precedence of other countries in this regard. Although some of these stoves and ranges have already received cursory attention in dealing with Class I, which embraced heating generally, I deemed it right to solicit a few notes on the subject from an expert who was in charge at Amsterdam of a large collection of food and cooking exhibits, and who, as a former cookery instructor to the British Army, was entitled to speak with some authority upon various practical points of which I myself was naturally ignorant, and unable otherwise to acquire equally reliable information. As these notes appear to be sufficiently explicit, and yet not too discursive, I beg leave to append them *in extenso* without further comment.

Notes by
Mr. Warriner

"The cooking apparatus exhibited in the English Section consisted of—

1. Captain Warren's Army Cooking Stove.
2. Captain Warren's Navy Ship's Hearth.
3. Captain Warren's Domestic Cooking-Stove.
4. Mrs. Dewly's Cooking-Stove.

5. Mr. Sparkes Hall's Cottager's Stove.
6. Weygood's Camp Stove.
7. Phillips's Gas Cooking-Stove.
8. Hen's, New York, Petroleum Stove.
9. Hepburn's Spirit Stove.

"The only trials that took place were with Nos. 1, 6, 7, 8, 9. They were made under the superintendence of Mr. George Warriner, late Instructor of Cookery to the Army. The trials made with Captain Warren's Army Stove were similar to those so ably described by the late Captain Webber in his report on the testing-house in the Paris Exhibition, with the exception that the various kinds of fuel exhibited were tried, in order to test their quality. It was found that in this stove coke would not answer, wood and turf together did very well, but took a large quantity. Newcastle bituminous coal quickly choked the flues with soot, and even impeded the cooking before being finished. The best coal tried was a steam coal (inland) exhibited by A. Bannister, Esq., of Hull; this gave hardly any smoke, and the cooking was well done; 200 lbs. of potatoes with roast meats being done better than by any other fuel; but as the apparatus was in the open air no satisfactory statistics as regards quantity could be arrived at.

"No. 6. Weygood's Camp Stove, is a small stove intended for camp or cottage use. Its peculiarity consists in it having an oven, in which, when required, on removing the cover over the fire any article can be boiled. The top of the stove holds a stewpan or a strainer, and the front of the fire a stand for a Dutch oven. The following were the objects cooked by it: A fruit pie was placed in the oven; it was cooked in 32 minutes. It was removed, the oven door opened, and the boiler put in, with 6 lbs. of salt meat, which took 1 hour 45 minutes. At the expiration of one hour 6½ lbs. of dumplings were added. At the same time that the pie was placed in the oven a small plum-pudding was placed in the stewpan on the top, with 3 lbs. of carrots, and within 30 minutes of the meat being ready, 6 lbs. of potatoes were placed on the steamer over the pudding, and were well done in 30 minutes. On the oven in front of the pie were placed three pigeons, with toast, these also took 30 minutes. The period taken to cook the above was 2½ hours, with 10 lbs. of coal; but it was considered that if the weather had been favourable, or it had been under cover, 2½ lbs. per hour would have been sufficient.

CLASS IV.

"No. 7. Phillip's. This stove is described in the reports on the Paris Exhibition, which give an exact description of it; only in the baking I placed the pie over the top burner for ten minutes so as to cook the interior; the crust got done by the time the fowls were done. I cooked a dinner, with fish, fowls, cutlets, three vegetables, and omelette for 6 persons, in one hour with 65 feet of gas.

"8. Petroleum Stove. This is a small cast-iron ring 9 inches in diameter, and 4 inches deep, with a tin lamp of the same diameter 1 inch deep, having two felt wick 3 inches long, worked by a small pen and pinion to control the flame. This lamp holds the petroleum, and rests on a small ring or stand. Three pints of water in a small kettle boil in 15 minutes; six mutton cutlets are fried in the same amount of time; a thick beef-steak also in about the same time. It consumes 1 gill of petroleum per hour.

"9. The Spirit Stove, known as the Rob-Roy, but called in the catalogue "Velocipede Stove," is a small portable copper stewpan, which holds every article required for use, as well as the can to hold the spirits. The heat generator consists of a small circular boiler in copper to hold the spirit; under this a small quantity of spirit is placed, which when lighted, quickly heats the spirit in the boiler, the vapour of which passes out through a small pipe that acts as a blow-pipe; the heat from it is excessive, and quickly cooks the object required. This stove is well adapted for travellers in places where a fire is not quickly obtainable.

"No other apparatus was tried. No. 4, Mrs. Dewley's Kitchener, is similar to that known as the Leamington Kitchener, with the exception that a flue passes through the oven. This kind of stove or kitchener is only adapted to burn smokeless coal; bituminous coal quickly fills the flues, and all advantages resulting from them is thereby lost. One has been in use in the Guard's Hospital, Rochester Row, London, for some years with very little repair."

Infants' feeding-bottles.

One last article connected with the food question, and exhibited at Amsterdam, calls for some remark, although, and indeed chiefly because, it did not find favour with the chemical members of the Jury to whose examination it was submitted. The article referred to is the feeding-bottle, sold by Mr. William Mather, of Manchester, and of 14, Bath Street, Newgate Street, London, at 3s. the dozen.

This infant's feeding-bottle meets with so much demand in Lancashire, where I am told its sale is counted by several hundreds of thousands each year, and indeed on the Continent, wherever it has been introduced, that I could not but regard it as my duty to inquire of Professor Gunning, the Government Analyst at Amsterdam, the reasons which had led to its condemnation. These reasons were kindly given to me, promptly and without reserve; and the question being one, in which it is of the first importance, to challenge criticism, and by all means to arrive at the truth, I do not hesitate to quote them in translation, leaving the further discussion of the knotty points involved to the scientific world. With these objections, which probably apply more or less to all infants' feeding-bottles made upon the same principle, I shall close this review of Class IV:—

“I object to the ‘infants’ feeding-bottles’ in all instances when any part of them is composed of caoutchouc, or any like material.

“There is nothing so ill-suited to the constitution of the human body as the material in question. Milk, which by contact is only slightly tainted with the smell thereof, although this is, perhaps, imperceptible to the keenest sense, must have lost a portion of its quality of quick and easy digestion.

“When, in consequence of suction, the pores of the caoutchouc are enlarged, some portion of milk always remains behind in them, which cannot, or at least cannot without great difficulty, be removed. This milk quickly becomes bad, and spoils the fresh milk with which it comes in contact.

“The caoutchouc material in question is made up of several ingredients. White zinc or white lead is very commonly employed, which are very poisonous.

“My objections are not founded exclusively on *à priori* conclusion. In this country many fatal cases have happened among infants, which, on solid grounds, may be ascribed to the use of these bottles.”

CLASS V.

Class V.—*Implements.*

implements.

Class V was devoted to tools for working-men, by which was principally meant tools to economize time and labour in any trade, or in domestic arrangements. This included tools for gardeners, farm-labourers, and dyke-workers; agricultural implements of all kinds; nets and tackle for fishermen; and sewing-machines. Steam machinery was practically excluded.

These articles, great as is their variety, are capable of classification under one or other of three heads, and thus formed three distinct groups, viz. :—

Implements for field-work.

Implements for the workshop.

Implements for household use.

In this last category many articles would naturally occur that have already received consideration in Class II.

Fishing tackle.

Taking Class V as a whole, it was a collection which contained much that was good, but little that was new, and was consequently of more interest to the Dutch themselves than to foreign visitors. The prejudice existing in Holland against the use of improved implements is so great that one generation of carpenters, gardeners, &c., succeeds another in the use of the homely tools to which they had been bred, and which they regard with affection as the arms borne by their ancestors in their battle through life. Thus the Dutch exhibits in this class were largely composed of models, many of them beautifully executed, of domestic, field, flood, or household equipments. Among them were representations of the modes pursued in the several provinces comprising the kingdom of the Netherlands, for capturing the scaly population of the deep, which enters so largely into the food-supply of the lower classes. Taking into consideration the limited area of the Netherlands and waters in which the originals of these models are in use, they manifested a remarkable variety both of material and construction, and were by no means capable of being simply divided into the two great varieties, one would have expected to find clearly defined, viz., salt and fresh-water fishing gear. There were drag, stake, hand, and casting nets of all sizes, strengths and shapes; some heavily weighted for deep-sea fishing; others less weighted for shallow waters like the Dollart or the Friesland Wadden; some of hempen rope, with meshes suitable for monster

cod ; others of cotton twine, with meshes small enough to hold anchovies ; some for salt and some for fresh, some for rapid, some for stagnant, waters ; nets for seas, nets for rivers, nets for lakes,—nets, in short, of suitable variety for all the fish that swim.

CLASS V.

It might, indeed, be instanced as a striking proof of the self-reliant and self-contained character of the Dutch peasant, be he a ploughboy or a fisherman, that almost every province of Holland, from Groningen in the north to Zeeland in the south, has its own special characteristics in agricultural and piscatorial pursuits to a much greater extent than is the case in England, Scotland, Ireland, and Wales, which form the component parts, on a much larger scale, of the sister kingdom of Great Britain. Each province of Holland has not only its peculiar crop rotation, and mode of draining, cultivating, and enriching the soil, but its own architecture both for dwellings and farm-buildings. In one province the cottages rise like pyramids from the grounds, and at a little distance the walls can hardly be discerned, so low is their perpendicular elevation and so overlapping is the roof. In another, perhaps adjoining, province, the roof is so flat as to be hardly perceptible or distinguished at a distance from the outline of the house itself. The farm-buildings in one province are invariably laid out in a square, of which the dwelling-house forms one side ; yet, cross a canal, five minutes walk from the door, which constitutes a provincial frontier, and you find the dwelling-house detached from the farm-steading, and at some distance from it ; and this with equal invariability and without any apparent cause. In one point only do they all agree, and that is a point of agriculture in which they are in advance of us, and which British farmers should imitate ; it is the universal pyramid thatched roof with protruding eaves with which they protect their haystacks from the rain by day, and from the dew by night. These roofs are slung between four (or eight if required) strong upright poles, and can be raised or lowered according to requirement, and as the stack, which is begun from the top, is gradually consumed. Who can tell how much of the fine quality of Dutch dairy produce is due to this system, which insures a dry and sweet supply of hay for the cattle throughout the wettest and most inclement winter, and, doubtless, renders service likewise during heat by preventing the hay from getting fiery and brittle. In

Dutch agricul-
ture.

Hay.

CLASS V.

the Haarlemmer-meer polder, many of the provincial characteristics of Dutch agriculture may be studied side by side; M. Gevers d'Eendegest, M. Verschuur, and other large land-owners, original proprietors from the date of its draining, having erected samples of each for the purpose of comparing results under similar conditions; the only point in which one and all agree, being the moveable thatch-roofs for their magnificent stacks of hay.

Madder.

Among the Dutch agricultural exhibits, one of great interest was contributed by M. Johannes Van den Berge, of Colynsplaet, in Zeeland. It consisted of a complete set of the implements used in the cultivation and preparation of madder, an important staple of produce among the southern Dutch peasantry.

Dyke-worker's tools.

Another interesting exhibit was a collection of dyke worker's tools and materials, for which the Exhibition was indebted to M. Conrad, the able head engineer of the Waterstaat Department, on whose exertions the physical existence of the Netherlands is dependent.

Kilns.

Messrs. Pietersen and Co., of the Hague, exhibited models of the so-called Hoffman circular kilns, or ovens for baking earthenware, porcelain, and for burning lime, &c. Their great merits are:—

1. That they allow of uninterrupted use.
2. That they burn any fuel; coal-dust, saw-dust, or even straw, or dried cow-dung.
3. That the heat, on one oven being let out, is not lost, but passes into the contiguous ovens.
4. That experience of them shows a breakage of only 2 or 3 per cent. on the articles baked, instead of 10 per cent. as in other baking-ovens.

Bookbinding.

Next in the order of arrangement came book-binding. This is an industry that has attained considerable development in the Netherlands. The work is always excellently executed, and from 20 to 30 per cent. cheaper than English prices. Utrecht is celebrated for its bookbinding. Dutch books, as a rule, are seldom as sumptuously bound as English library editions, but are invariably solidly sewn, and open much freer than most cheap English bindings of the same class. A book cheaply bound in Holland is usually much more convenient in daily use than a similar English bound book.

Sewing-machines.

Of sewing-machines there was a rich collection at Amsterdam, most of the best known makers being repre-

sented. Messrs. Petit, of Brussels, exhibited various cheap models for the working-classes, to whom they are supplied on the building society's principle. For 10 per cent. above the ordinary retail price he furnishes a machine to any working-man of good character, to be paid for in ten monthly payments. By this system the firm of Messrs. Petit boasts that it has raised hundreds of families from actual want to the position of regular investors in a savings' bank.

Messrs. Stokvis and Son, of Rotterdam, exhibited an American knitting-machine capable of making eighteen pair of socks in eight hours' time. Hose, and other articles of underclothing can also be made by this machine, the cost of which is 14l.

Knitting-machine.

The most important process of construction actually at work within the Exhibition where the lookers-on could trace the various stages of a manufactured article, was a work-table exhibited by Jacob B. Citroen, of Amsterdam, at which sat five young women engaged in making gold chains by very simple and light hand machinery.

M. Citroen's gold chains.

M. Citroen claims credit for having thus discovered an additional industry to which female labour may be advantageously applied. He has been six years in perfecting and simplifying the appliances to this end, and now states himself able to undersell the great German factory of gold chains at Pforzheim. He states, moreover, that he can only attain this result by the employment of female labour, which, while cheaper, is at the same time much more delicate, accurate, and active in all its manipulations. Trusted hands are permitted to take their work home, where, with the aid of a small vice, an oil lamp, and a blow-pipe, a corner of an ordinary deal-table, can be easily converted into a perfect workshop. The girls employed by M. Citroens range between 13 and 18 years of age.

Many of the mats and mattings made by the inmates of the pauper colonies of Frederiksoord, on the borders of the Provinces of Drenthe and Overijssel, were much admired; but were by no means below the ordinary market price.

Pauper colonies, their exhibits and history.

Though the Dutch pauper colonies are comparatively speaking well known, and though they are not remarkable for their financial success, a brief account of them will not probably be deemed out of place. They date from 1817, in which year, as well as in the previous one, all the crops

CLASS V.

failed in Holland. Bread attained a fabulous price, the small cultivators were completely ruined, the working-classes starved. Begging assumed such proportions as to constitute a public danger. Relief from such a condition of affairs was sought in the establishment of pauper colonies on the cheapest land procurable; and Prince Frederick of the Netherlands became President of a society for their organization. Speedily, about 5,000*l.* was collected, and a tract of country purchased, comprising 1,300 acres of fairish land, and 2,600 acres of unreclaimed heath. On these lands four colonies were established; two called Fredericksoord and Willemsoord for *bonâ fide* paupers and impoverished families, and two called Veenhuizen and Ommerschans for street beggars and destitute orphans, and to serve as a penitentiary for such of the inhabitants of the former-named colonies as would not work. To support these four establishments a subscription list was opened and signed by 20,000 persons who agreed to contribute 3½ florins a year a piece.

From 1818 to 1840 it has been calculated that each inhabitant of these colonies has cost, every expense included, 70 florins (say 6*l.*) per annum. As, however, the urgent necessity for their support happily disappeared with the return of good harvests, subscriptions fell off. The 20,000 signatures of 1818 dwindled down to 10,666 in 1839, to 7,300 in 1847, and are now represented by a mere nominal roll of a few of the original projectors, meantime the subscription itself has been reduced to 2½ florins.

The objects of the society were:—

1. To support, not in ease but in labour, such poor families as might obtain (on payment of 1,700 florins, 142*l.*, spread over sixteen years, and advanced by the parish or individual relieved from the maintenance of the pauper family) eight acres of ground, a house, a pig, agricultural implements, free schooling for children, and medical aid gratis, from the Society. At the expiration of the sixteen years a small rent, representing interest on the capital expended, was to be demanded.

2. To reform beggars, and instil a love of labour and a desire to better themselves into those who refused to work and were convicted of mendicancy. This class was to undergo a course of training in agriculture, or any trade they might select.

Notwithstanding all the advantages these poor colonists

have thus possessed, in having the idle eliminated from their ranks, and all their wants at the commencement supplied, the scheme has not succeeded as a self-supporting institution. Weaving has been introduced, and the cloth sold in large quantities; yet each year a new demand is now made on the States-General for money to enable the Society to make both ends meet, and to pay the interest on the not inconsiderable debt it has incurred.

Previous to 1864 (when the States-General assumed the right of disposing of the Java surpluses) the finances of the Society were kept tolerably well balanced by subsidies made them now and then by the King from the Dutch East Indian Revenues, of which he could practically dispose to the extent of over 2,000,000*l.* a year by a stroke of his pen. But times have changed in Holland as elsewhere; and since the passing of what is known as the Indian Comptability Law in the Session of 1864-65, there has sprung up among the majority in the Lower House a constantly growing jealousy of the appropriation of Indian revenues to other than Indian uses; and letting alone this somewhat tardy growth of a knowledge of the position colonies should occupy relatively to the mother-country, the ample means and surpluses of former years are no longer there to be disposed of right and left as temporary pressure might dictate; so that practically the action of the Second Chamber in this matter, though taking credit for high philanthropic principles, and sound doctrine in finance, amounts to little more than making a virtue of necessity.

However this may be, an item of charge in support of these pauper colonies (established in 1818, and meant to be self-supporting) is now of annual occurrence in the Budget of the Dutch Minister for the Home Department, and amounted in the Estimate for 1869 to 322,000 florins. For this sum are practically maintained in forced or voluntary labour, in sickness or in health, about 2,000 orphans and abandoned children, 1,950 bachelor and spinster paupers, 1,250 paupers married, with their families, 4,000 beggars, and 650 superannuated soldiers; that is to say, 5,850 persons in all, men, women, and children, being 55 florins, or 4*l.* 11*s.* 8*d.*, a head. Taking into consideration Drenthe prices, and the very indifferent, or rather what we in England should consider very indifferent, food supplied, this is far from being a successful financial result,

CLASS V.

since paupers are maintained by ordinary machinery at about 5*l.* a-year in Great Britain, where prices range higher, and a more expensive diet is given. If, moreover, remission of certain taxation, and some other indirect costs to the country are taken into consideration, this annual charge of 4*l.* 11*s.* 8*d.* a head is raised to 6*l.* 13*s.* 4*d.*

As a means of reforming mendicity, and of raising the condition of the small occupiers, the result has not been more successful than from a mere financial point of view. Barely 5 per cent. of the small occupiers are stated to have cleared themselves from the debt they incurred on entering the Colony to the Commune they came from and to the Society, and have been able after the first sixteen years to pay a moderate rent; while discharged beggars, after undergoing their term of reformation, varying from three months to three years, rapidly fall back into their old habits of life, many from desire to be reconvicted, and again find their wants supplied.

By some, the failure of this laudable attempt is attributed to too much being done for the Colonists—their not indeed being allowed to starve. No habits of self-reliance are created; and as it is many years before they can hope to pay off their debts and really begin to improve their condition, the impetus acting on them is so remote as to be insufficient to impel them forwards. Thus we have in Holland a striking illustration of the fact that, in relieving the poor, it is better to do too little than too much, and better to begin at the top of the ladder of distress than at the bottom—relieve those who ordinarily employ labour, but are temporarily prevented by some cause from so doing, and the labour-market is itself again; but the sudden creation of means of permanent relief, be they “ateliers nationaux” or pauper colonies, is the planting of a cancer in the body corporate of society—an institution of artificial origin, requiring artificial support, and representing ultimately purely artificial charity.

In Class V Belgium was meagrely represented. One of her exhibits, however, was of so great interest to coal-producing countries as to merit particular notice. It consisted in models of some improvements made by M. Nicolas Libotte, of Gilly, in his well known “parachutes” for the prevention of accidents in coal-pits. The principle on which it acts is as follows:—the cage in which the miners ascend and descend runs between four close fitting wooden

Belgian
exhibits.
Parachute for
coal-pits.

CLASS V.
—

perpendiculars. At the top or bottom of the cage are four claws attached to a very strong spring beam, which is bent by the weight of the cage to a bow sufficient to cause the claws to run clear of the woodwork. If the chain or rope by which the cage is suspended should break, the weight of the cage is removed from the spring beam, which straightens, and the claws immediately protruding fix themselves in the woodwork to the depth of over an inch, and arrest the further downward rush of the cage. This principle, subject to some variations in constructive detail, is in general use in the numerous Belgian coal-pits, and has saved hundreds of lives in that country. It is found in practice that when the cord that suspends the cage snaps, so instantaneous is the straightening of the spring-beam and the firm burying of the claws in the woodwork, that the cage has no time to descend a sufficient distance to acquire momentum.

Another exhibit demanding attention was a machine for grinding millstones, shown by M. de Marie, of Marchienne-au-Pont. The cost is 400 francs, and it is intended to perform by machinery a process hitherto laboriously performed by hand with great prejudice to the health of the workmen so employed. It obtained a gold medal.

Noteworthy
Belgian
exhibits.

Messrs. Kockeril, of Seraing, exhibited an ingenious hydraulic propeller for fishing or other vessels. The propeller is a fly-wheel under the bottom of the vessel, worked by a water-wheel, which is turned in the hold by a simple system of ingress and egress of the motive power—water.

M. Casterman, of Antwerp, exhibited a model oven, heated externally, for rapid and economical bread baking.

The leading characteristic of the exhibits from the North German Bund in class V was agricultural. Cheap farm tools were displayed in great profusion; of hay forks and rakes alone there were upwards of twenty varieties with wooden, iron, or steel prongs, differing in number, and priced from 1*s.* 8*d.* to 5*s.*

German
agricultural
exhibits.

In shoe lasts Germany was considered by the trade to excel any other competing country at Amsterdam, both in make and cheapness. M. Jos. Knettlmayer, of Passau, exhibited full-size rights and lefts at 36 kreuzers (1*s.*) the pair, and for ladies at 18 kreuzers (6*d.*) each.

Shoe lasts.

Mr. Joseph Miles exhibited spectacles and goggles made of glimmer (mica) for protecting the eyes of persons

Mica
spectacles.

CLASS V.

engaged in hurtful occupations. They cost from 8*d.* to 1*s.* 1*d.* a pair, according to finish, and can be had in white and blue. Similar spectacles are in general use in Holland among iron-workers and founders; and though young hands on entering these establishments are generally prejudiced against their use, this prejudice soon gives way. One great advantage which mica possesses in addition to economy is its value as a remarkable non-conductor of heat. The mica lenses are found to be most popular, and to wear best, when set in leather rims of sufficient depth to rest upon the face, and thus completely shield the eye from the possible approach of obnoxious particles.

Other German exhibits.

The exhibits from Baden in this class were confined to some glazed beer barrels, displayed by Jno. Werner and Co., of Mannheim. Some very good manufactured parchment paper or imitation parchment exhibited by Mr. Carl Brandegger, of Ellwangen, Wurtemberg, attracted a good deal of attention and admiration.

Austrian caoutchouc.

Perhaps the most remarkable among the Austrian exhibits in Class V was a display of india-rubber and caoutchouc articles in all stages of their manufacture, which was traceable from the raw material through the several stages of vulcanization, required for the various and variable purposes to which it is applied; viz.:—children's playthings, household uses, clothing, chemical processes, and a thousand requirements of our daily lives, which render gutta-percha one of the most valuable inventions of, and rich contributions to, modern civilization. A gold medal was bestowed on Mr. J. N. Reithoffer, of Vienna, by whom these articles were exhibited.

Carpenter's bench.

The only other Austrian exhibit in Class V to which I shall allude was of great interest to the real working-man, and perhaps more admired and envied by him than any other object in the whole exhibition. I refer to a full-size beech-wood carpenter's bench, exhibited by Franz Ritter Von Wertheim, of Vienna, which, with most of the essential tools for common work, was priced at 20 florins, or 1*l.* 13*s.* 4*d.* This bench was fitted with wooden screw vice and sliding planing-block; and combined great solidity with neatness. It was, I should say, about 7 feet long by 3 wide and 3 high. Numbers of such benches and sets of tools have been ordered from Vienna by the carpentering population of Amsterdam and other Dutch towns in consequence of this exhibit; and it is believed

and hoped that its popularity among those best able to judge of its merits will conduce not a little to promoting the custom of working at home by the piece, instead of working by time in unhealthy workshops, which in Germany has been considered to be an element of such importance in the moral and physical condition of the working-man.

CLASS V.

In punches and shears for use in working by the hand metals even of considerable thickness, France had several very good and cheap exhibits, and in one magnificent collection of circular saws, morticing machines, chisels, and other tools for carpentry on a large scale, she ranked second to none at Amsterdam, and was indeed only equalled by one exhibit from Great Britain, that of Messrs. Dodge, of Sheffield. The display referred to was made by M. Paul Gérard, of 32, Avenue Daumesnil, Paris, on whom a gold medal was justly bestowed. Its arrangement was such as to show off each article to perfection, and admit of tangible examination. It certainly sufficed to prove that neither England nor Belgium can calculate with any certainty, or even probability, on permanently supplying France with superior hardware of all kinds. The tools displayed by Mr. Gérard were quite equal to our own in finish and solidity of appearance. Carpenters and shipwrights at Amsterdam who use these tools, testify moreover to the hardness of their steel and to their durability in use.

French
exhibits.
Steel.

A second collection of carpenters' tools, files, and steel implements in this section, exhibited by M. Goldenberg, of Le Zornhoff, près Saverne, Bas Rhin, was equally remarkable for its low prices and the excellence of its articles, which many Dutch experts deemed the equals of our own best kinds, and far superior to the average of Belgian manufactures in this important class of goods. In short, though sorry to confess it, I deem it my duty to state that England could boast of no undoubted lead over France at Amsterdam in steel and hardened iron.

One article in this Court that attracted a fair share of attention from the Dutch, to whom it was quite novel, was a sewing-machine of which the motive power was electricity. It was exhibited by M. Jean Henri Cazal, of 5, Rue de la Chaussée d'Antin, Paris.

Electric
sewing-
machines.

An ingenious, but rather too complicated, needle

Needle
threader.

CLASS V.
—
English
exhibits in
Class V.

threader, exhibited by M. Texier, of Colombes-sur-Seine, at 1 franc was also the centre of much curiosity.

The highest order of award, "Diplôme d'Honneur," was only conferred on two British houses in Class V. These were :—

Messrs. Joseph and Robert Dodge, of the Continental Works, Sheffield, for tools and cutlery.

Messrs. Kirby, Beard, and Co., of 18, Cannon Street, London, and of Birmingham and Redditch, for fish-hooks and needles.

Messrs. Dodge.

The firm of Messrs. Dodge, which has been established for upwards of a century, is too widely and well-known both at home and abroad to need much remark. Their exhibits at Amsterdam were strictly within the special scope of the Exhibition, comprising all the steel tools required by the working-man, to which were added some beautiful specimens of ornamental cutlery; and they afforded a striking proof of the possibility of applying the important accessories of a handsome exterior and attractive appearance even to a purely utilitarian exhibition. Taken altogether as combining in the highest degree the qualities of which successful exhibits and successful exhibitions are made, the grand octagon display of Messrs. Dodge at Amsterdam deserved all praise, and showed that the firm in question has nothing to fear from the strict application of its own trade motto "Juste Judicato."

Messrs. Kirby,
Beard, and Co.

The second of these distinguished British houses, Messrs. Kirby, Beard, and Co., have long been celebrated for their needles, and have lately registered an invention which they deem important, known as the "indented eye." The advantage gained by this invention is, by flattening the eye, to prevent the bulk of the eye when threaded exceeding that of the body of the needle, thus necessitating a jerk to extricate the needle after each stitch. This jerk has hitherto only been avoidable by using a larger needle than the thread requires, and unnecessarily perforating the work with unsightly holes which the thread inadequately fills up. Another and perhaps more important invention is their improved needle for the blind, the aged, and the weak-sighted. The method of threading it is as follows :—The thread, held fast by three fingers, is extended by the forefinger and thumb of the left hand (forming a triangle

as it were), the side of the needle (firmly held in the right hand), is pressed along and across the thread, until the opening is found, when the thread passes in at a slit, and is perfectly secure to work with. The Kirby bend fish-hook is too favourably known to need a special notice.

The only gold medal carried off by the exhibits from Great Britain in Class V, was won by the American firm of W. Lamb, established at New York, for sewing-machines; but two "diplomes d'excellence," ranking with gold medals, but without the scope of the Exhibition, were obtained by—

Mr. Lamb's
sewing-
machines.

Messrs. Johnson, Matthey, and Co., of Hatton Garden, London,
for chemical apparatus; and by
The Patent Plumbago Crucible Company, of Battersea, London.

One of the most remarkable objects exhibited in the whole Exhibition was a platinum still and syphon, to concentrate 75 cwts. sulphuric acid per day, displayed by the first of these houses, Messrs. Johnson, Matthey, and Co. The price of this still was 1,240*l.*; it was made of chemically pure platinum, and combined all the most recent improvements in construction. The joints were autogenously soldered; the superiority, and indeed absolute perfection, of which process has been fully proved by the results of working more than sixty concentrating boilers, of capacities varying from 150 to 650 litres, in various large and well-known manufactories. Messrs. Cross and Blackwell are said to use a similarly expensive platinum apparatus for the preparation of their pickles, thereby avoiding all danger from verdigris and other poisonous elements, inseparable from the use of cheaper metals. Messrs. Johnson, Matthey, and Co. further exhibited—

Messrs. John-
son and
Matthey.

A condenser for syphon of improved construction.

Platinum distilling apparatus.

Platinum tubes, sheet, wire, dishes, crucibles, pans, lightning-conductors, capsules, gauze, &c.

Platinum assay apparatus, by the use of which gold assays can be made with greatly increased accuracy, rapidity, and economy.

Iridio-platinum gun-vents, for heavy ordnance.

Platinum in various forms: native, sponge, alloy; salts.

Nugget of native platinum, weight 4,728 grammes, of very perfect form (only one larger specimen known to exist).

Precious and rare metals: iridium, osmium, rhodium, ruthenium, palladium.

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Ingot of pure palladium, value 48,000 francs, extracted by Messrs. Johnson, Matthey, and Co., from native platinum and gold, of the value of 26,000,000 francs.

Palladium: wire, sheet, foil, sponge.

Pure distilled magnesium: wire, ribbon, powder, &c.

And other chemical and metallurgical products.

Plumbago
Crucible
Company.

The second of these firms—the Patent Plumbago Crucible Company—exhibited Morgan's patent crucibles for melting gold, silver, copper, brass, iron, steel, &c.; clay crucibles for refining the precious metals, portable melting furnaces, portable muffle furnaces, scorifiers, roasting dishes for assaying silver, lead, &c.; porous battery cells, &c. These articles have been in use for many years in the English, Colonial, French, and other mints and arsenals, and have been adopted by most large engineers, founders, and refiners. They claim uniformity of quality and power to withstand the greatest heat. Their average durability for gold, silver, and ordinary pourings, is stated at 45 pourings, though they sometimes endure 100. This is a matter of great importance to manufacturers in estimating their value, since every new crucible entails heavy loss on the founder, owing to the quantity of metal which adheres to and impregnates them, rendering the loss on the first twenty pourings in a new crucible much greater than on the pourings that follow, so that the older the crucible the less the loss.

Silver medals
in Class V.

Silver medals in Class V were bestowed on no less than eleven British houses. They were:—

Messrs. Ashby and Jeffery, of Stamford, Lincolnshire, for agricultural implements. The articles exhibited comprised portable mills, wheel hand-rakes, turnip-cutters, chaff-cutters, and oil-cake breakers. It is probable that ere long, as high farming is greatly on the increase in Holland, there will be a large demand from that country for articles made by this firm.

Messrs. Wm. Hounsell and Co., of the North Mills, Bridport, for fishing-nets. This house also sells hemp, cod, log, clothes, and other lines, at very reasonable rates.

Messrs. Woods, Cockeridge, and Warren, of Stowmarket, for agricultural implements of various kinds. The agricultural steam-engines from 1 to 10 horse-power, made by this house, are justly popular both in England and abroad, as they require no fixing, burn any fuel, are easily made portable, and are fitted with hot-water tanks, and other improvements. Their prices are:—

Horse-Power.	Diameter of Cylinder.	Stroke.	Price.
	Inches.	Inches.	£
1	3 $\frac{1}{2}$	7 $\frac{1}{2}$	45
2	4 $\frac{1}{2}$	9	60
3	5 $\frac{1}{2}$	11	80
4	6	13	100
6	7 $\frac{1}{2}$	14	130
7	8	14	150
8	8 $\frac{1}{2}$	15	175

If fitted with hot-water tank, 3 horse-power, 2*l.* 10*s.*; 4 horse-power, 3*l.* 10*s.*; 6 horse-power, 5*l.*, extra. Larger sizes made to order.

Messrs. D. F. Tayler and Co., of the New Hall Works, Birmingham, for pins and needles. This house also exhibited pearl-buttons, and iron and steel wire.

Messrs. W. Woodfield and Son, of the Easemore Works, Redditch, for needles.

Messrs. Hayes and Crossley, of 150, Cheapside, and of Alcester, also for needles. Besides ordinary needles, sharps, blunts, &c., this firm has a large business in machine needles of all kinds.

Messrs. W. Warne and Co., of 9, Gresham Street, London, for india-rubber goods.

Messrs. Sellars and Co., of 12, Walbrook, London, and Keighley, Yorkshire, for sewing-machines. These are made on the Wheeler and Wilson principle, with patented improvements, and their sale has already reached half-a-million. They are largely used in Ireland, as well as in England. The retail price is 7*l.* 10*s.*; and when it is considered that the wholesale price is 4*l.* 10*s.*, it will be seen at a glance what benefit might accrue to the working-classes from the establishment of a society on the Belgian principle previously alluded to, for purchasing such machines wholesale, and distributing them among deserving families at their cost price, plus, if necessary, the cost of management, which would—or, rather, should—be a mere trifle.

The North American Sewing Machine Company, New Brunswick, Canada; Agency, 5, Falcon Square, London, also for sewing machines. This is the original and improved "Weed," with the lock-stitch.

Mr. John J. Rollins, of Old Swan Wharf, London Bridge, for tools and implements.

Messrs. Wheeler and Wilson, of London, also for sewing machines.

The one bronze medal bestowed on British exhibitors in Class V fell to—

Messrs. Allen and Cragg.

Messrs. Allen and Cragg, of Lowestoft, for fishing-nets. This house does a very large business, and is especially famous for its mackerel and herring-nets of every sort, size, and weight, made of the best American cotton.

Honourable mention by the International Jury^s was bestowed on—

Mr. Sparkes Hall, Shoemaker's tench.

CLASS V.

Mr. Joseph Sparkes Hall, of 308, Regent Street, London, for a shoemaker's upright bench, price 25s.

As this is a matter of vital importance to a considerable section of the great community of working-men, I shall allow Mr. Sparkes Hall to tell his own brief but interesting tale by transcribing the following memorandum which fell into my hands at Amsterdam. To many readers other trades will no doubt occur in which the posture during work has not received sufficient consideration. Let us hope that all employers of the most precious raw material that any country can possess—labour—will imitate the example thus set them by a thoughtful and practical cobbler:—

“Boys should be taught to make and mend boots and shoes in an upright posture. The trade is by no means an unhealthy one, and it is only necessary to adopt a proper position of the body and a suitable bench to render it one of the most useful, remunerative, and pleasing of occupations.

“The fact is notorious that more mind has been manifested among the humble fraternity of shoemakers than has been found amongst any other equally humble class of the community.

“John Pounds worked at shoemaking while he conceived and practically carried out the first ragged school, and those celebrated shoemakers, Carey, Gifford, Bloomfield, Drewe, Kitts and Devlin, all taught the necessity of ‘sticking to the last’ as boys and going beyond it as men. Even Lord Byron praises the occupation:

“‘Ye tuneful cobblers, still your notes prolong,
Compose at once a slipper and a song.’

“It is, however, generally known that the bent, sitting posture in which shoemakers work is highly injurious to health. The posture is maintained for generally 12 or 14 hours in a confined atmosphere, the spine, stomach, and bowels become disordered, and, at a comparatively early age, numbers of this class solicit from us admission to the Hospital for Consumption.

“The Society of Arts, always the first in promoting the welfare of the industrious workman, thirty years since turned its attention to a remedy for this evil, and encouraged several ingenious contrivances which were

successively brought out, exhibited, and rewarded, but never adopted.

"Ingenious as they were, and made generally by scientific men and engineers, I believe they failed simply because they were not practically useful, and because they were too expensive. My attention was directed to this subject some months since, on visiting some of my workmen in an attic near Soho Square, where I found one young man bending over his work, with a bright eye and a flushed cheek—indications which I knew too well of rapid decline, caused, I have no doubt, by the posture of his body and close application. I suggested an upright posture, and asked him if he had ever seen a bench that would enable him to stand at his work? He replied that he had seen some contrivance at Mr. Dennis', in Pulteney Street, and would most willingly accompany me there. We went together, but found that the bench had been for some time past sold, or, as Mr. Dennis said, almost given away to get rid of it.

"Shortly after this, Dr. King Chambers delivered his lecture on "Industrial Pathology" at the Society of Arts, and I was the more impressed with the importance of a reform in the manner of shoemaking. He said,—'Shoemakers and bootmakers suffer equally from a constrained position, and also from the pressure of the last against the stomach. A patient of mine, now in St. Mary's Hospital, has a hollow big enough to put one's fist into from the pressure inwards of the breast-bone by the last; of course his lungs and heart are diseased by such distortion. Cannot some one devise a new sort of last which will not drive its tap-roots into people's lungs?'

"I immediately turned my attention to an upright bench, and having met with an ingenious and practical shoemaker (Mr. Herapath), who had recently returned from America, and, being in delicate health, adopted the standing posture with great advantage. Together we contrived a really useful, practical, and cheap bench, which will meet all the requirements of the juvenile as well as the adult shoemaker.

"The work can be carried on, on the whole, better in a standing than sitting posture; but that certain parts of rounding the soles, lasting, or fitting may be done on the knees, a stool is added to the bench which enables the workman to sit as long as he likes, and resume his standing

CLASS V.

position immediately after. I may, however, repeat to the young shoemaker advice which, perhaps, he has often heard before—

“ ‘Stand and grow good.’ ”

“ It is very desirable that boys in industrial schools should be taught to take casts and models of the feet in plaster of Paris ; it is soon acquired, and will give them a good idea of the true form of the human foot. This should be followed by last-making, which is a very important branch of trade and is seldom conducted properly.

“ The form of the foot must be studied from nature, and not from lasts made from old and useless patterns, which, in ninety-nine cases out of a hundred, had better have been burnt. The public have a right, now they are about to pay for industrial education, to demand a good industrial understanding.”

Cheap boots
and shoes.

In addition to this bench, Mr. J. Sparkes Hall exhibited excellent specimens of good and cheap boots and shoes for the poor. Among them is a cheap waterproof shoe, composed chiefly of felt and india-rubber. It requires little cleaning, is neat in appearance, and sells at 30s. the dozen pairs in sorted sizes. A stouter kind is sold at 35s., and children's boots at 24s. the dozen pairs. A still more economical article is sold for indoor wear,—the old-fashioned list shoe, valuable for people obliged to stand much on stone floors. These are made up by industrious poor women in London, and are sold at 20s. the dozen pairs. The Crown Princess of Prussia is said to have introduced these cheap articles among the poor at Berlin, where they are very popular. Mr. J. Sparkes Hall is also inventor of a patent sanitary ventilator for dwellings, price 20s.

“ Mentions
extra-
ordinares.”

Four British exhibiting houses in Class V received extraordinary mention, viz. :—

Mr. John Hynam, of 7, Prince's Square, Wilson Street, Finsbury, London, for plumbago crucibles, for melting steel, malleable iron, copper, brass, zinc, antimony, &c. Mr. Hynam farther exhibited, in Class II, fullers' earth in lump and powder for manufacturing and domestic use, and an anti-friction powder.

Messrs. J. B. Brown and Co., of 90, Cannon Street, London, for wire-netting. This firm also exhibited their new patent B B lawn mowing-machines, garden-seats, &c. These articles were all of excellent quality, yet though it is alleged that the galvanized wire-netting is much used by the rural working-man

for confining poultry, &c., it will probably be generally deemed to have been rightly adjudged as without the scope of the Exhibition, and thus affords an example of a class of article which, had the original purely utilitarian point of view been maintained, it would have been difficult to admit, and perhaps hard to exclude.

CLASS V.

Messrs. Clarke and Dunham, of 48, Mark Lane, London, for articles for flour and rice-mills. This house further exhibited their patent needle lubricator, of which over 2,000,000 are said to be in operation; and a rich variety of oil-testers, presses for stamping metal, belt-fasteners, smut-clearing machines, pressure and vacuum-gauges, and a fire-proof corn-scouring engine, for preventing the dust from injuring the sight or entering the lungs of the workman, without creating the friction that compels insurance offices to make such heavy charges.

Mr. William Robinson, of Bridgewater, Somerset, for a cask-cleaning machine. The merits of this patent are sufficiently well known. It has received prizes at many previous exhibitions, and though an object of interest to the Dutch at Amsterdam, had little or no connection with the objects there aimed at.

CLASS VI.—*Instruction and Recreation.*

CLASS VI.]

Instruction
and recreation.

Class VI was set apart for means of moral, physical, and intellectual development. It included within these elastic limits all principles and theories of education, especially technical education, and of recreation. Under the former heading, ranked principally school books and educational methods; and under the latter were to be found popular romances, gymnastic exercises, music, singing, games, and toys.—Lastly, Class VI included secondary trades, things to be done in spare time, and employments for women and girls at home. Of the 256 exhibits composing this class, the Netherlands counted 113; and thus their collection wore an aspect of completeness to which no other country in Class VI could compare. For this reason Holland will occupy the first and largest share of our attention.

Of objects made in leisure hours, there was a great variety of models in various materials; wood, cork, cardboard, metal, &c. There were models, more or less well executed, of many of the celebrated buildings and of most of the historical monuments of the Netherlands: but it was mainly in practical modelling—models of steam and water mills; of locks, docks, and shipping; in raised models showing the drainage of a town or district; and models of foundations,

Holland.

Models made
in spare time

CLASS VI.

staircases, or other architectural and building details of construction, in which the morticing, courses, &c., were accurately portrayed, that Holland excelled, and in these the industrious and practical spirit of the people was conspicuous. Especial attention was attracted by a very complete model $\frac{1}{12}$ of real size, of the diamond-cutting and polishing machinery used in the celebrated establishment of Mr. E. Coster at Amsterdam. The whole of this model was made by the exhibitor, Mr. N. Engelbrecht, in spare time; and its engines were wonderful specimens of handiwork; another striking model of machinery was a perpendicular steam-engine with parallel action, entirely made by hand (with the exception of the cylinder), of hammered iron and copper, and exhibited by D. C. Endest, of Amsterdam. A third hardly less remarkable exhibit was that of G. H. Kerbel, also an Amsterdam mechanic, of a low pressure steam-engine. A fourth deserving notice was a hand-made horizontal engine, made and exhibited by H. G. Theys; fifthly, and lastly, there was a very perfect and satisfactory model of a machine for doing heavy boring work in metals by the hand. Among these and other exhibits of the same description, medals and awards were freely distributed.

Anna Paw-
lowna Infant
School.

Turning from the perfection of workmanship displayed in the above articles, mostly made by adult or at least adolescent labour, some exhibits of a different order demand attention. These were as remarkable for want of finish and beauty, as the first mentioned were for conspicuous for those qualities, but they were none the less interesting or praiseworthy on that account. They were rude models, and drawings of an elementary order executed, under the direction of the attendant nurses, on the well-known Fröbel method, by the children of the Anna Pawlowna "bewaar" or infant school at Amsterdam. Ascending in the scale again, there were objects, some in straw-plaiting, but most of them in needle-work, exhibited by an Industrial Girl's School at Amsterdam, established in 1865, mainly by the efforts of the (in Holland) ubiquitous Society for promoting the public weal. "Maatschappij tot Nut van 't Algemeen." It is difficult to describe these exhibits in detail, but those who best knew the circumstances under which they had been produced, and the ages of the hands employed deemed them satisfactory proofs of the practical nature of the instruction, which, under what is really a

Amsterdam
Industrial
Girls' School.

compulsory educational law, is imparted to every child, male or female, in the Netherlands.

CLASS VI.

Next in order came exhibits from the King William's House at Amsterdam. These were principally books and methods of teaching in use in this institution, of which the first stone was laid in the name of the King in 1863, by its projector, the practical philanthropist, Mr. C. A. Adam Van Scheltema. This institution is as nearly as possible a copy of the Working-Men's Hall established at Shrewsbury by Mrs. J. B. Wightman, to whom Mr. Van Scheltema acknowledges himself indebted for the idea. Its functions are various: to promote and disseminate education among adults as well as the young, and to reclaim habitual drunkards; it has also a reformatory attached, and has Bible-meetings, singing-classes, public kitchens, &c. Its activity does not even stop here, for it has agents to visit the poor and make suggestions to their landlords and others, respecting domestic arrangements, drainage, good drink-water supply and the like. This last element of health it has introduced into 608 households in Amsterdam alone.

King William's
House.

A third institution demanding notice on account of its exhibits at Amsterdam, is the Work Association of Noordwyk, established in October 1868 for the purpose of finding work when labour is in excess of the demands upon it, or when the labour-market is temporarily overstocked owing to the cessation of some industry or the closing of some manufactory. Its exhibits were remarkable alike for variety, good quality, and cheapness. They consisted in school-knapsacks, leather slippers, hassocks, trunks, purses, linen and cotton balls for gardeners, cushions, potato-sacks, hat-boxes, and many other articles of small carpentry or constructed of wood, leather, canvas, cloth, paper, &c. Though this Society has hardly been in activity a year, it has already rendered great service to the labourer, and has paid its own expenses, thus taking rank among the most valuable of philanthropic inventions, those that are self-supporting, and even capable of paying a dividend if required.

Noordwyk
Work Supply
Association.

Lastly among this class of associations comes the parent, one may say, of them all—the “Society tot nut van 't Algemeen” (for the Public Weal). This institution was established in 1784 by Pastor J. Nieuwenhuizen, Protestant Minister at Monnikendam. It soars above the petty

Nut Van 't
Algemeen.

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differences of politics, sects, and denominations, and bestows charity wherever it is most needed. This element of its constitution proved sufficient for its success in a country torn by dissentient creeds, as the Netherlands had been. It spread throughout the country, and established branches in every community where eight paying subscribers could be found. These now number upwards of 15,000, each paying $2\frac{1}{4}$ florins per annum. This sum is raised by communal contributions to 100,000 florins, and with these small nominal resources (I say nominal, as other sources of revenue exist, legacies, donations, &c.), more real good is done in Holland than can possibly be expressed on paper. The society makes it a duty to look after the educational and other moral and physical requirements of those, whoever they may be, that most need assistance; and exercises, under a perfect system of centralized as well as local administration, a power and influence for good greater than can easily be imagined or expressed. I infinitely regret that neither time nor space allow of my following out in more detail the thousand ramifications of this magnificent monument of human charity. The matter is too large to be satisfactorily discussed in a cursory way, and is well worthy of being made the subject of separate study and report.

Messrs. Belinfante.

Of illustrated and popular works for imparting knowledge, there was a rich profusion headed by some beautiful and cheap editions of the "Wonders of Knowledge," and other books bearing the well-known name of the historical publishing house of Messrs. Belinfante, of the Hague.

Technical education.]

The state of middle class and technical education in the Netherlands was well represented by a good collection of drawings, busts, models, &c., displayed by a large number of schools, and was singularly complete and satisfactory. This collection was well arranged by itself in a long gallery, and formed one of the most striking departments of the Exhibition. The three Government inspectors of this class of instruction in Holland, Drs. Steyn Parvé, Bosscha, and Staring, had invited all the schools under their control to exhibit specimens of drawing. In this way was established a close competition of upwards of 40 schools that had responded to the invitation. Of these, 4 were day and evening schools, 16 were evening schools, 4 drawing academies, and 15 drawing schools besides the

various trades' and industrial schools of Amsterdam. These drawings were divided into four classes :—

- (a.) Drawings from nature.
- (b.) Drawings from copies.
- (c.) Rectilinear, architectural, and technical drawings, both from copies and from models.
- (d.) Designs of buildings, &c., made by the scholars themselves.

The number of drawings sent up for exhibition was so great that the inspectors were compelled to undertake the arduous task of making a selection of the most remarkable, to hang on the walls and place upon the tables, and in conspicuous places; the remainder being left in portfolios and boxes piled under the tables. For a detailed description of the schools themselves, of the school-money demanded for this class of instruction, of the ages of the scholars, &c., I would refer to an excellent Report on middle-class education in Holland, communicated by Baron Mackay to Her Majesty's Commissioners, and published among their Reports on Technical and Primary Education presented to Parliament rather more than a year ago. As regards the results exhibited, however, I must venture to express the opinion, that technical and rectilinear drawings seemed in many schools to have been less studied than classical drawing; and that much of the scholar's time is evidently wasted on very fine shading which might probably have been better utilized in rough outline and perpendicular work.

The original designs for buildings exhibited under head (d) were not so numerous as might have been expected, but would have elicited the approval of Mr. Ruskin for the appreciation manifested of the superior importance of practical architectural requirements over barren ornament and fictitious display.

The models exhibited (such as are in general use) for teaching rectilinear and perpendicular drawing deserve all praise. They were of the solid and outline kinds, and made of wood, iron, card, &c. Some of the most successful are those with a narrow metal outline, intersected by strings or wire attached to the different points and angles, thus visibly cutting up the solid body into several parts, the respective outlines of which, and their mode of cutting one another, are even more clearly thus defined than they are in the glass or other transparent models

CLASS VI.
—

sometimes used. Of plaster casts there was a rich collection. Each school receives a donation of these from Government on its original opening. The drawings from them exhibited by one or two girls' schools were admired for freeness of pencil and successful colouring.

As a branch or basis of technical education the practice of drawing from nature, from models and plaster casts, followed in these middle-class schools, is probably carried as far as is desirable in this country. There is great danger, when the scholars of some one school have attained a high degree of excellence in shading, say, or even in perspective, of pushing the ordinary standard too high for general purposes. The object is, after all, not so much to make a nation of artists as a nation of skilled artizans, capable of building the best houses, doing the best carpentry, iron-work, &c., and mixing the best colours in painting, in carpets, in prints, or in wall-papers. To the more gifted scholars, born to reach the higher realms of art, a comparatively low standard will suffice to indicate the right track; while to society at large, how heavy a per-centage of school time, which is a given and a small quantity in a workman's life, may be wasted in bringing the majority up to the level of the few. This is a pitfall into which many German trades' schools have fallen. In many of these the higher branches of physics and even of metaphysics, as taught by Pouillet-Müller, and Fichte, are studied by future carpenters and glaziers. I speak not from hearsay but from personal experience, as when young I attended more than one such "Gewerbeschule" in Germany, and the evil of over-education has certainly not decreased since those days. Speaking generally, I should say, that in this matter, the importance of which to the bulk of the population it is impossible to exaggerate, Holland has chosen a medium and a happy compromise between the excessive course of instruction given in Germany and the less pretentious national education of France, which, with all its defects, is sufficient to produce skilled labour of the highest class to such an extent as to awaken jealousy in the hearts of most of the British artizans deputed by the Society of Arts and Manufactures to visit Paris in 1867.

To return to details, the drawing academies of Rotterdam and Groningen were conspicuous on account of their satisfactory exhibits. The latter displayed landscape

drawings from nature of a high order, and the former was remarkable for its representations of industrial appliances.

The schools of Rosendaal, Roermond, Deventer, Kampen, Zwolle, Hoorn, the Helder, Haarlem, Alkmaar, Zaandam, Utrecht, Arnheim, Zeist, and Gouda, also contributed drawings and models to compete in what was really a valuable national collection of methods of instilling technical education, and of the results with which the effects of the Government and public of the Netherlands in this matter have been crowned.

To complete a very cursory and insufficient review of this section, it is necessary to mention the portfolios of drawings exhibited by the Society *Mathesis Scientiarum Genetrix* of Leyden. This society was established so early as 1785 by the Brothers Van Campen, Pieter Ryk, and Bartholomeus Van den Broeck, all architects, land-measurers, and practical men, to whom belongs the honour of having first detected the necessity of technical education in the Netherlands. From the path of utility traced for this institution by its founders, successive governors and patrons have never swerved, but constantly introducing every novel educational appliance, such as the Dupuis or Pestalozzi method, &c., this school has persevered for eighty-three years in its endeavours to create good citizens and skilful artizans, and at this honoured work it still continues to labour with success.

Mathesis Scientiarum Genetrix of Leyden

The Dutch law provides that there shall be at least one technical school (where drawing, modelling, &c., shall be taught) to every 10,000 of the total population.

Among the most complete of the Belgian exhibits in this class were those sent by the *Crèche Ecole Gardienne* of Saint-Josse-ten-Noode-Lez-Bruxelles. This establishment has just entered on its twenty-third year of usefulness. It takes charge of every baby brought to its doors from the ninth day after its birth to its thirteenth year, and it is divided into three departments: First, the *Crèche*, in which babies are kept on payment of 6 or 12 cents a day, according to age, or gratis if indigent, until they attain the age of thirty months; secondly, the *Ecole Gardienne* to which they are then transferred, and where they are attended to gratis, or for an additional one or two cents a day. This branch of the establishment takes in children by the day at similar rates. Here they remain until their seventh year, when they are transferred to the third and

Belgium.
Crèche Ecole Gardienne.

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highest division, the Section Professionnelle, either gratis, or on payment of an additional two, four, or six cents per diem, according to their age. On attaining their thirteenth year, the boys are apprenticed to trades, and the indigent girls are put into Government schools of extended primary instruction, whence they take service, or are provided for as school-mistresses, &c. In the medium division from thirty months to six years of age, straw-plaiting, twisting paper, folding and cutting paper, and rough drawing and modelling in clay after the Fröbel method are taught. In the Ecole Professionnelle, reading, writing, the elements of arithmetic, grammar, and European geography, with a little natural history are taught. In the case of girls, needle-work of different kinds is added, with boys, drawing, modelling, &c., are pushed to greater perfection.

The Budget of this valuable institution, which is one of the best in Belgium, and equal to the requirements of a large and average poor faubourg of 21,000 inhabitants, was as follows for 1868:—

RECEIPTS.

		Frs.	c.	Frs.	c.
En caisse au 1 Janvier	10,260	58
Souscriptions	4,526 0		
Subsides de l'Etat	1,000 0		
„ de la Province	750 0		
„ de St. Josse-ten-Noode	1,500 0		
„ de Schaerbeek	500 0		
Rétribution de la Crèche	641 88		
„ de l'Ecole Gardienne	579 96		
„ de la division supérieure	223 48		
„ du gardiennat	308 9		
Rétributions des soupes	2,011 50		
Recette brute de fêtes	5,167 12		
Dons	3,368 41		
Legs de Mme. Rose	2,179 80		
				22,756	24
Total	33,016	82

EXPENDITURE.

				Frs.	c.
Loyer	..	..	..	2,906	40
Contributions, &c.	..	..	..	196	60
Entretien de l'immeuble	..	..	..	126	87
Ménage journalier	..	..	..	4,633	90
„ des soupes	..	..	..	2,157	10
Lingerie et entretien de la Crèche	..	..	..	311	36
Chauffage	..	..	..	604	20

Eclairage	419	25	CLASS VI.
Frais de reconbrement	452	60	
Frais des fêtes	3,315	94	
Traitements et salaires	3,528	45	
Médicaments	26	70	
Frais de la distribution des prix	364	89	
Entretien du jardin	42	89	
„ du mobilier	238	8	
Impressions	349	35	
Objets classiques	177	44	
Divers	53	6	
En caisse au 31 Décembre	13,111	80	
Total	33,016	82	

When established in 1848 this establishment had only 35 regular inmates; it now counts nearly 300.

A gold medal was awarded in this Section to Mr. J. S. Van Doosselaere, for publishing 220 educational works in Flemish and in French. His press is established at Ghent, and is open to all concerned in educational literature on the lowest possible terms. As a successful disseminator of knowledge, Mr. Doosselaere deserves the highest praise.

The Communal School of Ghent made a good display at Amsterdam of its books and working models. It further exhibited specimens of forms and benches with backs and writing-desks attached, varying in size and design according to the age and sex of the children for whom they were intended. Considering that, at 8 hours a-day, at the estimate of 250 days in the year, deducting Sundays and holidays, a child, in the course of 8 years' schooling, from 5 to 13, would spend 16,000 hours, or two-thirds of the best of its growing days, in a fixed position, it is certainly desirable to insure that position being the least harmful attainable.

Two more Belgian exhibits call for notice; those representing the "Ecole Professionnelle des Jeunes Filles" at Brussels, and the "Ecole Industrielle et Communale" at Verviers. Both these were remarkable: the first for the taste displayed in designs for needle, worsted, and other work; the second for excellent drawings of machinery and industrial processes, well calculated to leave a lasting impression on the scholars by whom they have been so skilfully executed, with a demand for further knowledge.

The Prussian exhibits in the class devoted to education, recreation, and improvement, moral and physical, were

M. Doosse-
laere.

School
benches.

Other Belgian
exhibits.

Prussia.

CLASS VI.

few, and were, with two exceptions, confined to school books. The first exception was a collection of the well-known and excellent "Kindergarten" toys; and the second, suggestive of the real game for which the German youth is being educated, was a well-executed model, made in spare time, and exhibited by Gustav Hartmann, of Reichenbach, of a rifled cannon ready to take the field.

Weimar and Darmstadt had some good technical books and periodicals.

Austria

Austria also sent little in this class, but the little was of first-rate quality. The "Gewerbschule Jägerzeile," of Vienna, exhibited a portfolio of satisfactory architectural and rectilinear drawings, and Herr Franz Ritter Van Werthheim, of No. 14, Schwarzenbergplatz, Vienna, exhibited French and German editions of a work with plates, price 30 thalers (4*l.* 10*s.*), and entitled "Werkzeugkunde." This book, of which a counterpart, if not translation, should have its place upon the bookshelf of every industrial school in Europe, is intended, as its name denotes, to convey a popular knowledge of all the tools and implements in daily use, and thought little of on that account, but without which our condition would resemble that of the red Indian, and we should be compelled to live in caves or wigwams, clothe ourselves in skins or bark, and derive our only sustenance from wild fruits, roots, and the proceeds of a chase in which the bow and arrow would play the part of firearms and explosive ammunition.

France.

France, that is to say, the French Minister of Public Instruction, exhibited in Class VI a magnificent and complete collection of books, models, and every appliance suitable to the most advanced state of national technical education, but the favourable impression created by this splendid display of implements for mental culture was somewhat dispelled by a careful study of a series of very beautifully executed maps by M. Manier, entitled "Statistique de Progrès Intellectuel en France et en Europe." According to these charts of human knowledge, France is still behind many of her neighbours, not only in technical but even in elementary education. Jules Simon has said in a self-satisfied strain that, "Le peuple qui a les meilleures écoles est le premier peuple; s'il ne l'est pas aujourd'hui il le sera demain." But there would hardly appear to be sufficient statistical evidence to prove that the greatness of

France is as yet traceable to the cause given in that liberal formula; for these Tables state that, during the period 1858-67, there were, of 380 communes in the Department Maine et Loire, 288 wherein 25·82 per cent. of the population could neither read nor write. It also appeared that in 1866 of a total population of 33,000,000, 28 per cent. of the men and 48 per cent. of the women could not read, while 40 per cent. of the men and 60 per cent. of the women could not write, *i.e.*, could not sign their names. In the Department of Dordogne 58·18 per cent. of the men and 76·17 of the women, who were married, were unable to sign the register. This was in 1867; in the same Department, 43·82 per cent. of the conscripts could neither read nor write; and evasion of school attendance, which is a good index of the value popularly set on education as it requires more or less connivance on the part of parents, reached the high figure of 42·50 per cent. on the school-going population. Yet this is a picture, drawn by its own school-masters, of the country of which Napoleon III said years ago, “*Dans le pays du suffrage universel tout citoyen doit savoir lire et écrire*;” and which spends 1·25 per cent. of its national income on education.

With the exception of the fine official display above referred to, the results exhibited of this expenditure were meagre. “*Les frères de la doctrine Chrétienne*,” established at Passy, displayed methods of instruction, models, and such like, and some very good specimens of drawing. The architectural and machine drawing exhibited by the “*Noviciat préparatoire*,” were remarkable for sharpness of outline and regularity of colouring. The “*Pensionnat de Passy*” exhibited a few good crayon drawings of plants, animals, &c., done by boys and girls under 17 years of age, and some exhibits of the “*École de Dessin*,” of the Rue d’Apas, Paris, were universally admired; yet all these exhibits partook rather of the nature of upper middle class, or higher, than of middle, popular, or technical education, and were all flowers culled as it were from Parisian forcing-beds. From the provinces there was nothing but statistics of no very reassuring kind; and taken as a whole the French collection in this class, while showing the importance with which the authorities clothe the subject, also seemed to show that little progress has been made since Mr. Matthew Arnold reported upon French popular education in 1860, as “unpretending” and

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“of a low level;” and would indicate apparently that the yearnings and heartburnings of our artizans who visited Paris in 1867, for improved technical instruction at home, were misplaced; inasmuch as the results in taste and workmanship, for which they envied their French brethren (of whom a dozen are affirmed to be capable of carving a head in the material they work to one so developed in Great Britain), are due to the innate perception of art and the beautiful which belongs to the former, and which he has opportunities of improving every Sunday and holiday in the galleries of the Louvre and the Luxembourg, rather than to the regular dissemination of technical instruction. “The architecture of Paris is a great school,” and the mere fact of walking daily down the Rue de Rivoli on his way to work, can hardly fail to exercise an educating influence on the Paris artizan. Since, however, we lack this medium of conveying instruction, and persist in our refusal to open our museums and galleries on the days and hours when alone the working-man can visit them, it behoves us all the more to endeavour to provide for our artizans such counterbalancing advantages as can be found in an extended system of “Gewerbschulen,” and schools of art and industry, instead of sheltering ourselves behind the only half true and, after all, sad consolation, that our neighbours and our rivals are really but very little better educated than we are ourselves.

Probably one of the best results of extended technical education to a country would be to raise the standard of its manufactures. A larger margin of profit to the manufacturer, and consequent competence to give enhanced wages to the hands, accrues from the sale of articles of luxury than from that of articles of first necessity. Technical education would thus enable the working carpenter to become a cabinet-maker, and the skilful cabinet-maker, in his turn, to mount still higher in the ladder of his profession. Cheap work or cheap labour would be imported, or would import itself under the law of supply and demand, as might be required to supplement the work turned out by those who either could not or would not better themselves.

Louis XIV and Louis XV with their “Gobelins” and “Sèvres” manufactories would appear, if this line of reasoning be correct, to have possessed intuitive knowledge of political economy as applied to increasing the wealth of

nations. It is evident that the country which exports expensive manufactures, and imports its cheap necessities, must perpetually be accumulating wealth, and that it will end by getting the command both of the labour and the money market. This, indeed, is the alleged defect in Mr. Cobden's French Treaty. The wear of silks and expensive tissues has become cheapened and popularized in England; and to meet the purchases we thus annually make from France, and which exceed the value of the cottons and cheap textures we supply in return, a regular drain of gold out of England into France is established. This drain has long existed; but while it only amounted in the five years immediately preceding the Treaty to a total of 16,000,000*l.*, in the five years subsequent to the Treaty, it reached 20,000,000*l.*; and while in the last of the five years preceding the action of the Treaty this drain of gold, or excess of imports from, over exports to, France was represented by 5,000,000*l.* on the last of the five years above quoted subsequent to the Treaty coming into play it reached the enormous sum of 17,500,000*l.* Though this does not perhaps necessarily imply a large additional per-centage of drain of gold as compared with the increased trade, yet it is more than probable that the increasing poverty of Great Britain, and the popularly believed general increase of prosperity in France, may, to some degree, be attributed to the results of the figures I have ventured upon quoting, and which, like other national figures of money or population, require some years to become felt and apparent to their full extent. The cause of this excess of our imports from, over our exports to, France, and the consequent derangement of the balance of gold between the two countries, is due no doubt to the extraordinary development attained during late years by the French iron and machinery trades, which renders that country so much more independent of our steel and other mineral productions than the most sanguine Frenchman could have anticipated; and this, in its turn, is mainly due to the cut-throat policy of injudicious strikes: some of our most powerful trades' unions themselves putting out the fires and closing the gates of our vast puddling and smelting furnaces for long months at a time, on insufficient provocation, and to their own personal detriment, thus driving the trade into other countries, and teaching the world to be independent of Great Britain; or, to use a vulgarity

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which has the merit of conveying the exact truth and being easy to understand—thus cutting off their nose to spite their face. However this may be, we have now reached a point where it would positively appear to be a question whether increase of our import and our export trade with France, under existing circumstances, will not only entail increased drain of gold, leaving increase of national poverty behind. The answer to this question I shall leave to experts in the science of political economy.

Switzerland.

The exhibits from Switzerland in Class VI were neither remarkable for quantity nor quality. They consisted of a system for self-instruction in rectilinear drawing, and in some musical studies for the piano.

Denmark.

Scandinavia was as practical in the class under notice as in all the sections of the Exhibition that have been previously discussed. Denmark exhibited samples of work and methods of instruction given in the Technical Institute of Copenhagen. This establishment, which has 800 scholars, is divided into seven classes, viz.—

1. Elementary drawing.
2. Ornamental drawing and modelling.
3. Architectural drawing.
4. Trade drawing for carpenters, &c.
5. Handicrafts, such as engraving, lithographing, &c.
6. An evening class for surveying, and natural sciences.
7. Repetition class.

Scholars passing certain standard and competitive examinations are admitted gratis to a technical academy. This establishment further exhibited a great variety of good gymnastic appliances, such as are in daily use there; and a method for learning swimming, exhibited in connection with it by Captain P. Schouwburg, of Copenhagen, showed that the Danes do not fail to appreciate at its proper price an art which, apart from its value as a means of saving life, has so large a claim on the favour of mankind as a simple, cheap, and generally accessible means of recreation, promoting both health and cleanliness. It is not too much to say that no school can be deemed complete in its machinery which does not possess a swimming class.

Sweden.

Sweden and Norway had interesting collections of elementary school methods, and some rough school models and furniture, suitable for peasant life and home instruction, which assumes such importance in a country like Norway,

where the population is about one-twentieth of what it is in Holland to the square mile, and where the sparse cottages are further separated during the winter months by short days, deep snows, and impassable mountain paths.

CLASS VI.

Speaking generally, Great Britain was poorly and inadequately represented in Class VI.

Great Britain.

One "diplôme d'honneur" (ranking above gold medals) was conferred on—

Messrs. W. and R. Chambers, of 47, Paternoster Row, London, and of 339, High Street, Edinburgh, for their excellent educational publications, which are too well known and too highly appreciated to call for any comment in this place.

A silver medal was bestowed on—

Mr. J. Solomon, of 22, Red Lion Square, London, for magic lanterns and slides, stereoscopes, telescopes, barometers, spectacles, and microscopes.

Many of these articles were fairly classable under means of recreation; but apart from the question of their excellence, it can hardly be alleged that their utility or special adaptation to the objects of the Exhibition rendered them a fitting collection to represent a country where out-door and in-door recreative exercises take so high and popular a place in the national characteristics of the people as they do in Great Britain.

Bronze medals in this class were obtained by—

Mr. B. S. Cohen, of 9, Magdalen Row, Great Prescot Street, London, for black (Cumberland) lead pencils; and by, Mr. Ellis A. Davidson, of 29, Clarendon Gardens, Maida Hill, London, for books and models.

These were good exhibits, and strictly suited to the object in view. The books were divided into two classes, viz.: books for home study for workmen, and a primary series of books for workmen's children. The first of these classes formed the first volumes of a technical series, and were entitled:—

- Vol. 1. Geometry applied to Trade. Linear Drawing.
- Vol. 2. Projection, showing the Development of Solids.
- Vol. 3. Building construction.

The second of these classes, the primary series, comprised—

- 1. Right Lines in their Right Places.
- 2. Our Houses, and what they are Built of.
- 3. Our Bodies: an Elementary Text-Book of Human Physiology.

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The drawing models exhibited by Mr. Davidson were equally satisfactory—

1. Small ladder.
2. Step-ladder.
3. Garden-gate.
4. Field-bridge.
5. Bridge.
6. Cottage.
7. Garden-roller.
8. Doorway.
9. Church.

Finally, “mentions extraordinaires” (without the scope of the Exhibition) fell to the three following houses:—

Messrs. John Brinsmead and Sons, of 18, Wigmore Street, Cavendish Square, London, for two cheap upright pianofortes, ranging from 21*l*.

Messrs. G. and H. Dean, of 65, Ludgate Hill, London, for books for children, birthday presents, &c.; and,

Messrs. James Perry and Co., of 37, Red Lion Square, for steel-pens, and sundry writing appliances.

When one thinks of the multitudes of interesting exhibits England might have had in this class, which would have rendered her contributions of value and importance in the eyes of foreign schoolmasters, philanthropists, and all others taking a practical concern in the ends pursued at Amsterdam, it is impossible not to feel and express a deep regret that we should have no Board or Department in England charged with the general surveillance of Exhibitions. “They somehow manage these things better in France,” is an old cry; but it applies specially to the present instance, where a small table, easily overlooked, held all the jewels we exhibited in this important class, and where the popular eye was taken by, and comments were freely passed on, the more conspicuous pianos, and the velocipede, which were held to represent John Bull’s ideas of technical educational development; while, but a few paces off, the rich collections of the French Minister of Public Instruction were well calculated to convey a widely-different impression, and one by no means favourable to our Continental reputation.

CLASS VII.—*Trades' Unions, and Co-operative Associations.*

CLASS VII.

Trades' unions
and co-opera-
tive associa-
tions.

Class VII, the last of the classes into which the Amsterdam Exhibition was divided, somewhat resembled the postscript to a lady's letter, inasmuch as it contained the kernel, and the key of the whole undertaking. It was set apart for the Reports, Statutes, Rules and Regulations of Associations, having for their object the promotion of the well-being of the working-classes; and the task which the Jury set themselves, was to appraise the extent to which the various institutions represented fulfilled the avowed aims of their originators and supporters. This class was briefly styled, "Trades' Unions, and Co-operative Associations." It contained but 303 exhibits in all; but that its importance was not to be measured by the numerical ratio of those who contributed to fill the shelves devoted to the reception of the class of literature it collected, may be gathered from the fact, that of these 303 exhibits, no less than 170 came from the third-rate Kingdom of Wurtemberg. Though forming a very complete and valuable collection illustrative of the condition of this great question within the limits of the narrow country whence they came, these 170 exhibits covered in reality less moral ground than the numerically scanty collections from the great industrial centres of the world—the cradles of the movement—the sources of the torrent, which it is the task of modern politicians to keep within its banks. Exhibits from these countries were pearls of price, and carefully selected, with a view to representing the two edges of the sword that hangs suspended over the neck of our industrial prosperity. Consequently they were numbered, not in hundreds, but in tens, in twenties, and in thirties; and, moreover, in order to enable the Jury of this class to arrive at sound and righteous judgment, power was given them to fill up any void or gap they might detect in the co-operative chain of evidence they were appointed to consider, by the insertion as exhibits, competent to receive awards, of any institutions or associations whose tenets and practises seemed deserving of international recognition, and who, by some accident, through modesty, ignorance, or nonchalance, might have failed to represent themselves.

For the sake of order, and convenience of reference,

CLASS VII. the whole collection comprising Class VII, was divided under the following heads:—

Benevolent Societies.
Provident Funds.
Savings' Banks.
Co-operative Stores.
Co-operative Labour.
Sick Funds.
Pension Funds.
Trades Unions.

Omitting the first of these, which have to do with public or private charities, and really have no place in a list of institutions organized by working-men themselves for their own purposes; and the last, which will be discussed by themselves, the remaining six may be more conveniently classified under one or other of three denominations, viz.:—

1. Societies of consumption.
2. Societies of production.
3. Societies of credit.

The first of these has hitherto found most favour in Great Britain, the second in France, while the third is ubiquitous wherever the German tongue is spoken. In Belgium all three are found, but in the sister Kingdom of the Netherlands the first and third alone exist, and that in limited though augmenting numbers. The first is a real benefit to mankind, the second may become so if applied as a remedy to the worst defects of trades unions (as is proposed by the Comte de Paris in his excellent work on this subject) and the third is a harmless accessory to the first and second. To those who seek for information on this theme "Rochdale" is the password for the first; 1848 is the era which gave an impetus to the second, of which, so far as I know, but one or two isolated and imperfect specimens existed before; and Schultze-Delitsch is the honoured name of the disinterested man who founded in 1850 the people's banks in Germany, which represent the third. On all these methods for promoting well-being among the working-classes, interesting details, and much that will doubtless prove new to English readers, will be found in a work published in Paris in 1869 entitled, "Du Mouvement Co-opératif International, Etude Théorique et Pratique sur

les Différentes Formes de l'Association : ' par Eugène Pelle-
tier, Fondateur de la Compagnie Française des Chocolats et
des Thés ;" a little book which, written ostensibly to sell the
chocolate of a great Co-operative Association of 1,500
retailers, has a wider interest as tracing from their com-
mencement many of the most remarkable forms this move-
ment has as yet assumed.

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Being unwilling to repeat what can thus be found else-
where, I shall pass with these preliminary remarks on the
three great species into which Co-operative Associations (as
distinguished from Trade Unions) may be divided, to the
manner in which they were represented at Amsterdam, and
to the principles that were followed by the Jury in dealing
with them.

The Jury for Class VII was composed of 13 members,
including a President, Vice-President, and Rapporteur. It
did me the honour to name me its President, and it will
always be to me a subject of the deepest regret that, not-
withstanding the fact that Vice-Admiral Harris, Her
Majesty's Minister at the Hague, was sincerely anxious to
give the fullest effect to the Earl of Clarendon's expressed
desire that every facility should be afforded to enable me to
take my place at Amsterdam, it proved practically impos-
sible for me to disconnect myself sufficiently from the daily
routine of the chancery work of Her Majesty's Legation to
permit of my taking up my residence for the time at
Amsterdam, and devoting myself exclusively to the service
of the Jury. The utmost that proved practicable, therefore,
was to watch its proceedings generally, and leave the virtual
Presidency to M. Donnat, the Vice-President, nephew of
M. Rouher, a distinguished Frenchman, well known for the
enlightened interest and careful study with which he has
approached many of the most important social questions of
the day.

Principles
adopted by the
Jury in
Class VII.

The first difficulty which beset the Jury at the outset of
its labours was the impossibility of all its members, or even
any one of its members, reading or much more, making
himself conversant with, the rules, statutes, reports, &c., of
several hundreds of societies written in English, French,
German, Dutch, Danish, Swedish, &c., within the limited
time allotted for the adjudication of awards. To meet this
difficulty the Jury ultimately resolved to adopt certain
fixed rules and tests to be of general application ; and rather
than undertake the practical impossibility of judging

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associations, of which some, though not founded on sound social and financial doctrines had yet worked well on the whole, according to their results, it was resolved to stamp with approval, and hold up to public imitation, those associations only which appeared to the Jury to be firmly based on principles not of a nature, even if pursued with enthusiasm, to convulse society, or foster dreams impossible of realization without arresting the progress of modern civilization.

This line once drawn between the good and bad, and the chaff winnowed from the wheat, they were to inquire, as closely as possible, into the sum of difficulty vanquished in the founding and maintainance of approved associations ; and a strong desire was manifested, and supported in principle at least by the majority of the Jury, to reject, as failing in the vital element of independence, all even of approved associations dependent on another class than that which composed them for the finances necessary to their development. Advances of money to workpeople by their employers, even for such laudable purposes as procuring sewing-machines, &c., were regarded with disfavour, as placing the workman too much in the power of his benefactor, and as tantamount to an approval of a mode, highly civilized it is true, of placing the yoke of bondage, serfdom, or slavery, upon the neck of the working-man. Both sides of this question were fully discussed ; but, as has been said, the majority of the Jury decided on upholding the necessity of placing the labourer, above-board at least, independent of his employer ; and though it was not desired by any to sever the happy combination of the employer and the benefactor, it was held that the benevolence should come spontaneously—not as the result of a treaty between capital and labour, and thus liable to individual abuse. In the hands of a harsh taskmaster, a recognized blending of the benefactor with the employer might easily be conceived to lead to a renewal in some shape or other of the old demand for bricks without straw ; while, on the other hand, such blending of benevolence and power in a weak or unwise man, might easily give rise to the danger of doing too much for the labourer (as is done for example in the Dutch pauper colonies), and of relieving him from the responsibility which rests upon him under the motto, applicable to the whole of human kind, “Aide-toi et Dieu l'aidera.”

The only Dutch association that, in the opinion of the Jury, possessed the required conditions to a sufficient extent to justify them in conferring upon it the highest award, a "Diplôme d'honneur," was the Amsterdam Society for Promoting the Interest of the Working-Classes, established in 1854 under the patronage of the Prince of Orange. It has upwards of 650 members, who pay 5 florins a year, and is divided into the five following distinct sections:—

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Amsterdam
Society for
Promoting the
Interests of the
Working-
Classes.

1. Scavengers' Brigade for sweeping and cleaning the streets and gutters on moderate terms, thus procuring employment for many otherwise unable to get work, and improving the sanitary condition of the town.

2. Benevolent Fund for affording temporary relief to members in times of illness or when disabled by accident.

3. Industrial School for sons of workmen. This branch was established in 1861, and receives subsidies from the City of Amsterdam. The King of the Netherlands endowed it with a large and valuable collection of models, implements, and tools, in 1866. It has now 125 scholars, from 13 to 16 years of age, and 13 teachers. Schools hours are from 8 till noon, and from 2 till 8 o'clock. The instruction is purely technical.

4. Lectures for the working-classes, established in 1866. From fifteen to twenty lectures are given during the winter, the doors are open to all comers, and they are attended according to the weather and the interest of the topic by from 600 to 1,000 workmen.

5. For procuring employment for needlewomen. In this section great good has been cheaply attained by the giving of instruction gratis in the use of sewing-machines.

This Association contributed towards sending some Dutch artizans to visit the Paris Exhibition in 1867. As has been seen it receives extraneous assistance, and is not entirely self-supporting and co-operative in its character; its success, however, is none the less complete on that account. More than one of its sections would have been perhaps more properly placed in Class VI; but its real and most marked character is combination of the working-men of the poorest class to provide themselves with a living; and from this point of view it is entitled to take rank among co-operative labour societies.

The only gold medal bestowed on Netherlands exhibits in this class fell to the Workmen's Reading Institute of the Hague—an Association conducted on sound principles,

Workmen's
Reading Insti-
tute of the
Hague.

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Dutch silver
medals in
Class VII.

but presenting no unusual features calling for particular notice.

Three silver medals were awarded to the Dutch Associations in this class :—

1. The Netherlands Association, for abolishing the use of strong drinks, established at the Hague ; for its facts, and not for its principles.
2. The Zaandam Society of "Help Yourselves," an association essentially co-operative, in the best sense of the term.
3. The Haarlem Society, "Weten und Werken" ("To Know and to Work"). This Association seeks to raise the position and the understanding of the working-man, by means of winter lectures, readings, debating clubs, and other social gatherings.

Bronze medals.

The only bronze medals given in this category were :—

1. The Working Man's Association, established at Middleburg in 1865.
2. The Credit Society, or Savings' Bank, of Franeker.
3. The Leyden Society, "Tot Nut en Genoegen" ("For Use and Pleasure").

'Tot nut en
Genoegen.'

This last may be taken as a fair type of the shape combination of workmen usually assumes in Holland. It dates from 1857, is one of the oldest of its kind, and has undergone no important modifications of its constitution since its establishment. Its members are printers, that is type-setters, pressers, &c. ; but so long as they number under ninety they may, under Article 3 of their Statutes, enrol binders and others into their union. Throughout these Statutes no reference occurs to wages, work hours, or strikes ; they are strictly confined to regulations respecting the entrance money and the administration of the funds, for objects of necessity or pleasure, for the maintenance of the sick, for providing an out-door excursion and feast on "Kopper Monday" (usually the second Monday in the year), &c. Subscriptions vary according to requirement, cents being levied as frequently as funds are needed for purposes of relief. This Society is in a flourishing condition, and affords real support to its members in times of trouble.

"Mentions
honourables."

Honourable mentions were conferred in two cases on Netherlands associations represented in this important class, viz., on the "Winkel," or Shop Societies, of Deventer and Gouda. These are co-operative clubs and stores started by workmen engaged in the same trades for the purpose of promoting their physical, social, and intellectual ends.

It will thus be seen that, so far as Holland was concerned, the timidist of the timid among politicians would have found nothing to make him tremble in the jury work at Amsterdam. The soundest principles were laid down and rigidly maintained. It will next be interesting to inquire into the nature of the Dutch Associations whose claims to an award were not endorsed by the appointed judges.

Of these rejected Societies there were about forty; but they did not offer much variety of purpose or detail.

One of the most characteristic of them was the Blacksmiths' and Ironworkers' Association of the Hague, established in 1862. This is purely a benefit society, the funds being exclusively applicable to maintaining the sick, burying the dead, and promoting harmony among themselves; this object is generally sought by the regular giving of as many fêtes in the course of the year as the funds at their disposal will allow. There is generally at least one ball given to the wives of members of each Society in the course of the winter. The subscription to this Society, which is called after the god of subterranean fire, Vulcan, is 10 cents a week, and for this a member, in case of certificated sickness, receives 2 florins a week for thirteen weeks in succession. If his illness continues, members have to pay an additional 2 cents a week; the sick member continuing to receive 2 florins. If a member returns himself sick, and on examination it is proved he was "shamming," he forfeits all claim to relief during the next three months. Sickness or injuries brought on by fighting, drinking, or a member's own fault, have no claim to relief. Burial expenses are entirely met by the fund. There is a widows' fund, kept separate for such of the members as choose to belong to it.

Blacksmiths' union.

The association of this kind that seems widest spread throughout the Netherlands is the Typographical Society. Its head-quarters are at Utrecht, but it has branches at Alkmaar, Amsterdam, Arnheim, Breda, Deventer, Dort, and so on all through the letters of the alphabet, at almost every town or place where a newspaper is published or books issue from the press. These branches take different names, other than those of the localities, to distinguish them; such names as "Friends in Faith," and even longer mottos as, "Behold how good and joyful a thing it is to dwell together in unity;" but though called

Printers' union.

CLASS VII.

by different names they form part of a great whole, and their members subscribe 2 cents a week, payable quarterly to the head quarters at Utrecht, and other sums varying from 6 to 10 cents a week to the local branch to which they belong. In its statutes the objects of this association are declared to be:—

1. The general promotion of the material prosperity of all its members, who must be, or have been at some period of their lives, working-men employed in the printing, binding, or other affiliated trades, such as lithography, engraving, or even acting as shop-boy in libraries or stationers' shops.

2. The establishment of a pension fund.

3. To endeavour to procure work for members out of work through no fault of their own.

4. To enable very promising members to study their trade abroad, so as to be able to bring home to Holland the latest improvements and inventions.

5. To promote zeal and workmanship by occasional giving of prizes for very meritorious work.

6. The dissemination of knowledge by the publication of a weekly newspaper principally devoted to questions of interest to the trades concerned, so as to keep the members at the height of the latest information that could be of service to them respecting prices, markets, &c. This journal to be conducted by an elective editor and to abstain from discussing politics or religion.

7. Finally, to promote everything that can contribute to the honour of their several callings and to the advantage of the work-givers as well as of the workmen.

Such is the character of, I believe, the widest spread working-man's association in the Netherlands. It is singularly unobtrusive in the exercise of its functions, and to this cause, and to their native modesty which makes Dutchmen look abroad in search of idols, whether in literature or any other branch of civilization, I attribute its failure to secure more prominent notice at Amsterdam than the mere conferring of a medal of the third order on its Leyden branch. At a recent annual gathering of its General Assembly at Utrecht, in reply to some query of questionable propriety, its Chancellor of the Exchequer replied with dignity that the Association and its objects were recognized by Act of Parliament signed by the King, and that application of funds a hair's-breadth beyond the

limits prescribed in its well-known statutes would render the Administrators of those funds liable to prosecution in a court of law. Now, as the statutes do not make any reference to strikes as a possible contingency which it is necessary to foresee and provide for, it follows that the maintenance of a strike would render them liable to an action for breach of trust.

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In the Hague there exists also a powerful association of upholsterers and journeymen of affiliated trades. Its objects, as stated in Article II of its statutes, are:—

Upholsterers' unions.

1. To provide its members in case of illness with 3 florins (5s.) a week for not more than ten weeks in the course of any 12 calendar months.

2. To pay 10 florins towards the burial of any member.

3. To promote harmony among themselves by holding two, three, or more social gatherings, according to the state of the finances, within the year.

The subscription is $12\frac{1}{2}$ cents a week, and a man goes round to collect it, thus saving many of the members a long weekly walk.

This association has in its statutes a final Article which, taken side by side with the fact that the affiliated shipwrights of Amsterdam and Nieuwe Diep are as yet the only collective body of men who have struck work seriously, demanding higher wages or a reduction of hours, is, to say the least, suggestive. This Article reads—"Whenever circumstances occur for which these regulations do not provide, the administration has a right to act according to the course of events, in the interests of the association." How far this Article could be made available in providing funds for the maintenance of a strike has not yet been proved; but it is the most suspicious thing I have come across in the statutes of any Dutch association of which I have been able to obtain perusal. The name of this society is the "Aurora," and it was established in 1864, the year in which the legal restraints upon co-operation of workmen against their employers were removed in France. This may be only another coincidence, but it also looks suspicious.

Numerous societies, of which one or other of those already mentioned may be considered the type, exist in Holland; almost all of them have been established since 1864; and while on the one hand they bear evidence to the

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social, as distinct from the socialist character of the Dutch working-man, on the other they afford equal and abundant proof of the existence of the spirit of combination in Holland and of the contented nature of a people whose principal food is potatoes, flavoured with a little mustard sauce, when they can afford it.

"Handwerksbloei."

The only society I have been able to discover that in its statutes deals openly with wages and hours of labour, is the Arnheim Association, entitled "Handwerksbloei" ("Bloom of Industry"). Its object is to promote the interest of the workgiver and of the workman, by reducing the hours of labour for efficiency of workmanship, retaining uniformity of wage. Its members are employers of labour in all trades, who are briefly styled the "Baas" or "Boss," a word which the original Dutch settlers of Hoboken (New York) have permanently engrafted on the American vocabulary. In and around the rich and thickly peopled commune of Arnheim this society has enrolled well-nigh every workshop and factory under its banner, to the great satisfaction of the workmen themselves, who, on attaining a certain standard of proficiency, find their hours of labour curtailed to an extent representing in the aggregate one day in eight, or even two hours in the day, the former wages being retained. The workmen of these masters are furnished with "livrets" for which they pay 5 cents. (1*d.*) and in which their efficiency is noted and their promotion to shorter hours recorded. They are divided into three classes of efficiency. A master is bound to give up the "livret" to a workman quitting his service, and the members of the association also bind themselves not to re-engage a man (without a general enquiry into his case), who has taken service with a master or "Boss" not belonging to their association.

Building and singing societies.

Building and singing societies exist in Holland, though the former only in one or two of the principal towns, such as the Hague, Zwolle, &c. They cannot as yet be said to have had any important results; but they afford additional evidence of the extent to which the Dutch workman devotes his savings to ends consistent with sound principles and common sense.

Savings' banks, co-operative stores, &c., founded by the "Nut van 't Algemeen."

Among the most successful of the savings' and other people's banks which exist in Holland are those founded by the "Nut Van 't Algemeen" Society, to whose educational and charitable triumphs allusion has been made in

Class VI. Some of these banks rank among the earliest foundations of the society. One of the first of them was established at Haarlem in 1793, and has prospered ever since. They number 140 in all, and are scattered broadcast over the face of the country. The one established at Rotterdam pays interest on deposits exceeding 160,000*l*. The deposits of many of the smaller branches, however, are under 40*l*. Financial operations are strictly prohibited; Government and other real securities being the only investments permitted by the laws of the society.

The "Nut Van't Algemeen" has also led the van in this country in the establishment of co-operative stores, of which it has already founded fifteen, besides projecting many more. Their peculiarity consists in their disbursing to their clients during the winter at wholesale price, and under the most advantageous conditions, provisions and firing, for the sums entrusted to them during the summer and good season. They are beginning to find great favour with the working-men of this country.

In times of scarcity of work, this society organizes public works, roads, draining of lakes, &c., and it is thus by assuming a variety of characters,—that of the school-master, of the banker, of the salesman, as occasion arises,—that this powerful association, bound together on the simple principle of doing good, without regard to creed or politics, applies itself to the formation, throughout the length and breadth of Holland, of institutions worthy of the name they bear, as being both physically and morally for the public weal. The only blot on its escutcheon was removed in 1864, a great year of reform on the Continent, when the Jews, hitherto excluded from participation in its benefits, were admitted, and assimilated in every respect to the rest of the community.

For its services in this category "Het Nut Van't Algemeen" received at Amsterdam a "Grand Diplôme d'Honneur."

The English awards in Class VII were not numerous, but comprised nearly every exhibit, besides one or more persons and institutions supplied by the Jury to complete the character of the selection. If the names of many worthy and successful British co-operative efforts are not to be found upon this limited muster-roll of eleven awards, their failure to obtain honourable recognition at Amsterdam is attributable only to their neglect to challenge an inquiry

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into their statutes and conditions on which alone such recognition could be based. Yet short as is the list now under review, it will be found to contain sufficient samples chosen from among the best and most successful of our co-operative associations both of consumption and production, to give the continent a fair idea of the extent the movement has attained in the land of its birth. At the same time no trades union figures on the list to mar the harmony of the picture, by presenting before the imagination spectral figures of half-starved operatives, wending their way at dusk to a neighbouring field to sit in judgment on one of their brethren, whose honest desire to earn his daily bread and send his children back to school again, has finally overcome his allegiance to his union, and given him the courage to incur the certainty of abuse, of picketing, and rattening in all its villainous shapes, which represent, in merry England, the consequences of breaking through a strike.

Rochdale.

The first place in the rank of approved exhibits in this class was naturally occupied by the honoured name of Rochdale; the cradle in which the giant power of co-operation was rocked through the dangers which beset its childhood, till it attained an age to walk alone, and stride manfully through the civilized world on its errand of humanity.

Three representatives of Rochdale appeared at Amsterdam and were adjudged awards. Two of them received the highest, the "*Diplôme d'Honneur*," and the third the medal of bronze. The two former were the Central Co-operative Society, for the successful application of the federative system to the co-operative movement, and the Society of Equitable Pioneers, for its general results; the third was the Co-operative Corn Mills Society. Of all these the history has been too often written to make repetition pardonable. They have occupied the pens of foreign as well as of English writers, and are as well known on the Continent as they are at home. They belong to the highest order of real benefit societies, being self-supporting, and founded on sound doctrine, social and financial.

Post-Office
Savings'
Banks.

A "*Diplôme d'Honneur*" was awarded, though not without partial dissent from Germany, to the Postmaster-General of Great Britain, for his exhibits representing the working of our Post-office Savings' Banks; the objection raised to them being the too active participation of the Government,

which was deemed socialistic and opposed to the old-fashioned notions of sound economical doctrine. The only other "Diplôme d'Honneur" bestowed on Great Britain in this section fell to Mr. Thomas Twining of Twickenham, for his powerful and successful efforts to improve the condition of the working-classes, and especially for his handbook of economic literature, and the Guide to his Museum for the working-classes.

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Mr. Twining.

Gold medals were adjudged to the Working-Men's Club and Institute, the Working-Men's College, and the Working-Women's College, all in London. Full accounts of the nature and results of these institutions are willingly furnished by their respective principals and secretaries.

Gold medals.

A gold medal was also most justly awarded to Henry Briggs, Son, and Company, of Whitwood, for their successful application of the principle of admitting workmen as shareholders to a partition of profits. In 1865 this hitherto private firm hit upon this expedient to procure for the future immunity from ruinous strikes, from which they had suffered severely, and registered their collieries as a limited liability company. The success of their scheme has been most unclouded. Workmen have abandoned their trades' unions—no strikes have since occurred, while the profits of the collieries have enormously increased. Profits, after deducting 10 per cent. for interest on the capital invested, and after payment of all charges and allowance for depreciation, wear and tear, &c., of plant, are equally divided between the former master, Messrs. Briggs and Son, and the workmen, now partners in the concern. The fullest particulars of this remarkable achievement will be found in vol. vi. of the Reports on the Paris Exhibition of 1867, containing "the Returns relative to the new order of reward," presented to Parliament in 1868; one of the most interesting and valuable books of this or any other age, and one which has not yet been studied as it deserves.

Messrs. Briggs.

Three bronze medals complete the unsullied roll of British awards in Class VII. They were bestowed upon Mr. J. Brucciani, sculptor, of London, Mr. Gustav Meinhardt, of Birmingham, and Mr. Joseph Gibbs, Private Secretary to the late Lord Mayor, Sir James Lawrence, to whose personal energy, and appreciation of its real character, the Amsterdam Exhibition was so heavily indebted.

Bronze medals.

The first of the above-mentioned gentlemen, Mr. J.

Prince Consort's bust.

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Brucciani, received his award for plaister casts of the Queen and Prince Consort and of the Prince and Princess of Wales, presented for the decoration of the British Court. The bust of the Prince Consort had at the very outset of the undertaking been unanimously demanded by the Dutch Society for the encouragement of manufactures and industry, the projectors of the Exhibition, as an object without which no International Exhibition, more especially one devoted to the interests of the working-classes, could be regarded as complete. This tribute to the memory of a great and enlightened Prince was entirely spontaneous on the part of the Dutch workmen, members of the Society above-mentioned, and was the more remarkable from being confined to the case of the Prince Consort, and not extended to the bust of any other princely benefactor of the human race.

M. Meinhardt.

Mr. Meinhardt received his medal for general valuable services rendered in connection with the Exhibition at its commencement. He is manager in the great firm of Messrs. Peyton and Peyton, who also enjoy the reputation of having successfully introduced into their large and wealthy business the co-operative principle, and the equal division between master and men of any profits over (I believe) 15 per cent. on the capital they themselves represent.

Belgium.

The Belgian exhibits in Class VII were numerous and remarkable, and showed the complete extent to which the co-operative net is now spread over the whole of that industrious kingdom. The Associations represented comprised many specimens of combinations of workmen for purposes both of consumption and production; and the statutes of all those whose merits were recognized by awards at Amsterdam were free from the stain of clauses for the support of strikes. Such clauses are, however, now beginning to be inserted in the statutes of some Belgian associations, which thus afford the nearest approach to the social monster termed Trade Unionism, as yet existant on the Continent. The date in Belgium of this immunity from the penalties to which they were subject under the old Penal Code of Napoleon is June 11, 1866; but the legislation to which they owe this immunity does not recognize the right of unionists to threaten, intimidate, or ratten non-unionists, or even one another. Such conduct is still punishable by heavy fine and imprisonment,

and the extended immunity is strictly confined to removing the former invidious distinctions between combinations of masters and combinations of men, in other words, up to June 11, 1866, employers could legally combine to keep wages down, while it was illegal for artisans to combine for the purpose of keeping them up. This blot is now erased from the statute book of a free State.

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In this section of the Amsterdam Exhibition a "diplôme d'honneur" was awarded to the "Société Anonyme de la Vieille Montagne," established at Chênée near Liege, which may be said to be the centre, or Rochdale, of the Belgian co-operative movement. Zinc is the metal worked by this Society, which, besides employing at its head-quarters 6,500 hands, a figure representing a population of over 20,000 souls, counting wives, &c., has seventeen large branch establishments in Rhenish Prussia, France, and Sweden. The workmen it employs may all be considered as shareholders in the concern, their labour being regarded as so much capital invested in a common undertaking, for which they receive a regular per-centage as wages, and further bonuses (on the Messrs. Briggs' principle) according to the profits of the firm; they are thus individually interested in the financial results of the works, and encouraged to personal exertion.

"La Vieille Montagne."

The wages of the hands employed by the "Vieille Montagne" have in this manner increased 45 per cent. in twelve years, without remonstrance or coercion on either side, and they are continually increasing. The hands have, moreover, built up during that time, by the organized investment of 1, 2, 3, or more cents a week, a reserve or benefit fund of 600,000 francs, a separate savings' bank, where they get 5 per cent. on their deposits, a building fund, co-operative store, means of recreation, such as bands of music, archery, and rifle shooting associations, &c., in some of which the miners turn out on fête days dressed in national costumes of the middle ages, with bells ringing, banners waving, and other accessories of display.

A second Belgian "Société Anonyme," on which a "diplôme d'honneur" was conferred, is that established at Bleyberg near Verviers, also in the Province of Liege. This Company, which works zinc, lead, and silver, and which up to within ten years ago was often in great straits for labour, being geographically so situated near the Dutch and German frontiers that it was mostly fed by vagrant

"Société Anonyme" of Bleyberg.

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hands from foreign countries, who decamped on hearing of a rise in wages or recommencement of work at home,—or, for the matter of that, elsewhere,—owes its present prosperity to the successful endeavours of its managers to attach workmen to the spot by improving their social condition and supplying all their wants. To this end building funds were established, and the workmen were so successfully encouraged to embark a share of their wages in them, that now one-third of this number are proprietors. Churches, libraries, reading-rooms, primary and sewing schools, hospitals, savings' banks, co-operative stores, &c., have grown up with the rapidity of magic. Girls are excluded from working in the mines and foundries, and are now being widely sought for service in the neighbourhood owing to their good bringing up. Mothers are not allowed to labour beyond the precincts of their own dwellings and gardens, the men's wages being calculated as sufficient for their support. The Society allows of no "cabarets" in the vicinity of its works, and limits the number of people in each house.

Other
"Diplômes
d'honneur."

Three more "diplomes d'honneur" demand notice in this section. The first was conferred upon the "Société Co-opérative de Consommation dite l'Equité, à Liège;" the second upon the "Société Anonyme pour la Construction de Maisons Ouvrières à Verviers;" and the third upon Mr. G. Janssen, à Cureghem lez Bruxelles, a practical philanthropist and large employer of labour, who occupies in Belgium the same position for successful and persistent endeavours to better the condition of his workpeople by the establishment of building funds, model dwellings, co-operative stores, &c., as is occupied in France by the world-wide honoured name of M. Jean Dolfus, of Mulhouse.

Gold medals.

Several gold medals also fell to Belgian exhibits in Class VII. Among them was one conferred upon the "Société Anonyme de Marcinelle et Couillet," a company which combines in the treatment of its operatives many of the best characteristics of the Belgian associations above dealt with.

Gold medals were further bestowed on "La Société Anonyme pour la Construction de Maisons Ouvrières à Anvers;" "La Société Anonyme pour la Construction des Maisons Ouvrières à Liège;" "La Société pour prévenir les Abus du Travail des Enfants dans les Manufactures à

Verviers," a very valuable association ; and "La Société Anonyme de l'Espérance à Verviers."

All these societies are based on sound social and financial foundations, and are equal ornaments to the civilization of the 19th century and to the little kingdom in which they have grown up.

Lastly, a gold medal fell to "Les Etablissements de Sainte Marie d'Oignies, Manufactures de Glaces et Fabrique de Produits Chimiques à Aiseau lez Charleroi." This company employs over 1,000 men, and has laboured without intermission since 1828 to improve their moral and physical position by the promotion of schools, savings' banks, the building of model dwellings, churches, and the like. When one of the hands has laid by enough money to buy a lot or little piece of land, and enjoys a good character as a workman, from 500 to 800 francs are advanced to him without interest to build a dwelling. The repayment takes place by instalments, and at the will of the borrower. It is a high tribute to human nature in general, when under favourable conditions, and to the Belgian operative in particular, to be able to state, as the company does in its last printed report, that in no single instance where such an advance has been made has the money been over long in being willingly repaid, or have measures had to be taken to obtain repayment. Sixty-three per cent. of such workmen employed by this company as are heads of families are actually proprietors of the dwellings they inhabit.

This company also has its co-operative stores of all kinds, inclusive of butchers' shops and public kitchens, and credit is given under certain fixed and stipulated conditions. The details of these stores and of their management are very interesting and worthy of close study. Unfortunately, neither time nor space permit of their insertion here ; but this is of the less importance, as an admirable and complete report on the "Progress and Results of Co-operation," in this instance, published by the director of the establishment, M. Houtart Cossée, is readily obtainable on application. In this report it is stated that drunkards are dismissed, and holiday-making on Monday not permitted ; and M. Houtart Cossée modestly states that the happy results they now enjoy of over forty years' labour to improve the position of their men, have not been attained by what may be termed personal government, but

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by conforming to the wishes of the hands employed, consulting them freely, and enlisting their hearty support. If this system has, in some instances, caused the advance to be slow, some prejudices requiring time to overcome them, the advance has at least been sure and steadily progressive. This affords another confirmation of the maxim, that it is better to do too little than too much, and that the great talent, the happy knack, is to hit off the exact point of demarcation between what should be left to the working-man to do for himself, and what should be done for him, so as to stimulate and not slacken his own exertions.

Silver medals.
Miners' funds.

Silver medals were awarded to two "Caisses de Prévoyance des Ouvriers Mineurs," the one at Charleroi, the other at Mons. Among miners, to whom accidents are of so frequent occurrence, even when every proper precaution is taken by the State, the proprietor, and the workmen themselves, it is probably more necessary to have funds available for widows, children, &c., than among any other body of men. Yet the introduction of such "Caisses" into Belgium is due to the life-long energy of one man, M. Auguste Visschers, who unites the rare qualities which render the enthusiast practical. For thirty years he has laboured in the cause of these Associations in Belgium. Great difficulties had to be vanquished before sufficient unity of action could be introduced into a scheme that could succeed only if formed on the most extensive principle of combination. Isolated funds were liable to be crushed by individual calamities, which they were altogether unable to stand up against; but a national fund for that purpose, subscribed to by the State, the proprietors, and the miners themselves, would be invincible in its strength, and would hardly feel beyond a calculable and a harmless point the financial effects of one of those direful pit or mining accidents which from time to time echo through the European press. This is the result that M. Visschers has attained. He has formed an association counting 86,300 subscribers (being 91·37 of the total Belgian mining population), largely subsidized from without, with a revenue reckoned at 2,370,000 francs, an expenditure assessed at 2,080,000, and a balance in hand of 4,400,000 francs. M. Visschers may be regarded as one of the most successful of the practical philanthropists of the age. He has the honour of having embodied in a

popular and lasting shape the national motto "L'Union fait la Force." CLASS VII.

If the time and space at my disposal compel me now to quit Belgium, and trace the combination wave elsewhere, let it not be therefore imagined that I have exhausted the roll of exhibits or awards in this section. Belgium took a high place at Amsterdam, probably the first place in the Exhibition taken as a whole, and especially as judged from its loftiest points of view. At least a dozen other Belgian Co-operative Stores were represented, and were worthy of receiving awards. There was the "Société la Bonne Foi," of Pepinster; the "La Ruche" and "Ateliers Réunis," of Brussels; the "Le Bond," of Malines; the "Mouleurs Réunis," of Liege; the "La Sincérité," of Ensival; the "Sans Nom non sans Cœur," of Ghent; the "Aidez-vous les uns les Autres," of Antwerp; and, lastly, the "Economat," of Messrs. Duyk, of Brussels. These were one and all represented in a highly satisfactory manner, and one which makes that little Kingdom a worthy rival of Great Britain in the struggle for industrial distinction.

France was the country, as has been said, whose displays of silks and satins implied a non-appreciation of the special aims of the Amsterdam Exhibition. In Class VII, however, she was by no means wanting in interesting objects for study and reflection, and received numerous high and well-deserved awards. Among these were no less than five "Diplômes d'Honneur," the first of which was conferred upon the French Minister of Finance, for various institutions established in the interest of the workmen engaged in the administration of the Government tobacco monopoly. The establishments of the "Régie" number 17, and employ in all 18,000 workmen. Each branch has its own medical officer appointed by Government, who supplies medicaments and comforts, gratis; takes care that infectious patients are properly isolated; gives certificates of physical inability to work; and publishes an annual report on the sanitary condition of the people he is appointed to look after. France.

The workmen employed in these manufactories are divided into classes according to efficiency, and derive regular benefits from promotion from class to class. Each class has its "Section des Arts et Métiers" especially charged with keeping all the plant and machinery in work-

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ing order, so as to render the establishment independent of extraneous labour and entirely self-supporting. The stokers and others in different employs receive bonuses in a fixed ratio or per-centage for fuel or material of any kind economized and preserved from waste: 10,000 francs are annually distributed as presents to the most deserving workmen, and there is a well organized and largely subsidized "Caisse des Retraites." The condition of the workmen has steadily improved under all the measures taken to elevate them; and the whole institution, though bearing the unpopular name "monopoly," is a real benefit to the people it employs, while the tobacco it produces is of standard price and quality, liable to no adulteration, and probably as little deleterious to its consumers as is consistent with the habit to which it ministers. Results like these go far to reconcile one to monopolies when well conducted, and suggest the belief that a few such institutions in Great Britain in place of the boasted private enterprise and competition which is so busily engaged in underselling and adulteration, in forcing every class to be its own shopkeeper, and in breaking travellers' bones, would probably be productive, on the whole, of greater good than harm.

M. Dupont.

The second "Diplome d'Honneur" fell to the great Paris printer, M. Paul Dupont, of 45, Rue de Grenelle, St. Honoré. His house does a business of over 5,000,000 francs a year, and 10 per cent. on the net profits are divided among his workmen, according to their individual merit, and not in regular proportion to their different salaries. This house has followed this course for twenty years, and claims the first place in the application of one of the happiest and most successful ideas of modern times. Each new hand, on admission to the "Ateliers," receives a silver medal worth 5 francs as a badge of office and link between him and his employer. This establishment has its sick and provident funds of all the usual kinds, its loans of honour to its workmen, its "Caisses de Retraite," its savings' banks, its schools, libraries, reading, and singing rooms, its co-operative stores, its familisteries, gardens, baths, in short, every invention of modern days for promoting health, wealth, happiness, and religion. To use the words of M. Dupont himself, "Ce n'est plus un atelier, c'est une famille composée d'un millier de personnes." Let every employer of labour in Great Britain who does

not yet come up to this high standard cast his eyes across the Straits of Dover, study this establishment in his own interest, and go and do likewise, or better if he can.

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The third "Diplôme d'Honneur" fell to MM. Mame et Fils, a second monster printing-house, established at Tours, Indre et Loire. The solicitude of this firm for its workmen, women, and children is said, if possible, to exceed that displayed by M. Dupont. The features with which the latter has made us familiar are here reproduced, with the additional moral and physical advantages that a country town has over a great capital like Paris.

MM. Mame.

Fourthly and Fifthly, "Diplômes d'Honneur" fell to the "Société Internationale des Etudes Pratiques d'Economie Sociale," established in Paris in 1864 (the year of the law repealing the legislation which forbade trades' unions in France), and to the "Société pour la Protection des Apprentis et des Enfants employés dans les Manufactures." The first of these seeks to accomplish its aims by discussion and publicity; its aims being the encouragement of all good co-operation among workmen, but the discouragement of such combination when it assumes the character of conspiracy, and becomes amenable to the law. Its members are senators, députés, philanthropists, and other serious men of high social standing. The range of its inquiries may be defined as embracing everything connected with the realization of the following popular formula of the French "Société des Ferblantiers":—

"Société Internationale des Etudes Pratiques d'Economie Sociale."

"1. Par les sociétés de production nous récolterons nous-même les fruits de notre travail.

"2. Par les sociétés de consommation nous procurerons à nos familles une vie plus saine et meilleure en dépensant moins.

"3. Par celles de crédit nous nous passerons des prêteurs à l'usure, et surtout de cet établissement philanthropique que l'on nomme Mont-de-Piété."

The Society for Protection of Apprentices and Children engaged in manufactures was established in 1867. In the preamble to its first report it states its object to be to imitate the example set by Great Britain of framing a special legislation to promote its ends and enforce its views. That such legislation was not less required in France than in England may be gathered from the following extract from an interesting report by Mr. Coningsby on the condition and habits of the French working-classes,

"Société pour la Protection des Apprentis et des Enfants employés dans les Manufactures."

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published by the Society of Arts. "The age at which children are considered old enough to be taken into factories seems to be lower in France than here. I was under the impression, until I had visited some of the workshops in Lyons and its neighbourhood, that the French people were more merciful to their little ones than we are; but from what I saw in the south, I am convinced that this is not the case. I have been in all the principal manufacturing districts of my own country, and witnessed the sorrowful spectacle of boys and girls, who should have had several more years of play, hurrying to their work on cold, dark mornings, with careworn faces and stooping figures; but for a sight which is most calculated to move a man of ordinary sensibility to compassion, one must go into the neighbourhood of the French silk factories, and watch the melancholy procession of babies (they can be called nothing else) dragging their little limbs slowly away from the places where their tiny energies have been tortured out of them."

Gold medals.

Three French gold medals in Class VII next demand attention. They were—

1. "La Compagnie des Mines de Houille de Blanzv, Saone et Loire," remarkable for the completeness of its institutions for the workmen employed. This company has constructed and allotted over 100 dwellings, on an annuity system that is well worthy of being studied.

2. MM. Leclaire Defourneaux et Cie., Painters, of Paris. This house ranks early among those who have applied the plan of participation in profits. Its workmen have always distinguished themselves in times of political agitation by their quiet and peaceable conduct.

"Les ouvriers
lunettiers."

3. The "Société Co-opérative de Production des Ouvriers Lunettiers." This was regarded at Amsterdam as a faithful type of the best of the numerous associations (over 50) of this kind existing in France. It was established in 1849, and may thus be said to date from a revolutionary period; but its members have been distinguished by their quiet behaviour and contented spirit in times of political excitement. The members are all working spectacle-makers, and they elect their administrative officers, foremen, &c., as required. They do a business of upwards of 25,000*l.* a-year, and have hitherto escaped disputes growing out of division of profits, or want of unanimity in action, differences that have caused the disruption of more than one society of this kind in France and elsewhere. In

adjudging this gold medal, some members of the International Jury in Class VII placed it on record that they concurred in the proposed recompense, inasmuch as the "Lunettiers" had succeeded well in the application of a dangerous principle.

Three silver medals bestowed upon France in this class next demand special notice. They fell to—

1. MM. Bouillon and Son, of the Forges de Larivière, près Simoges, Haute Vienne. This house was established by M. Bouillon, Père, in 1837, for converting pig-iron into wire, nails, &c. For some reason or other the population of the surrounding country set their faces against the design of M. Bouillon, and combined not to take work in his factories, which thus became dependent upon vagrant labour picked up from Franche Comté, Switzerland, and Burgundy, and was with difficulty kept up to 50 strong. No time was lost by M. Bouillon in endeavouring to overcome the unpopularity of which he was the object, in the hope of ultimately reconciling the native and estranged population, and thus becoming independent of the imported labour, which, shunned by the neighbourhood, never stayed long, and formed a floating and ever changing element, to the great detriment of the regular work of the factory. In this view M. Bouillon converted his château into comfortable working-men's apartments, and laboured for their comfort with such success that a very short time elapsed before the neighbouring villages sought his service. If M. Bouillon's efforts had ceased in the attainment of his immediate object—a labour supply for his factory—he would be entitled to little credit in this place, however deserving a member of society at large in other regards; but the taste thus cultivated, of necessity at the beginning, grew upon him, until the well-being of his hands, originally promoted for his own benefit, was advanced from a secondary to a primary place in his solicitude. His next venture was to employ felons and convicts on the expiry of their terms of imprisonment, and though this met at first with opposition from the steady and respectable families in his employ, his influence with his men carried the day, to such an extent that no unpleasant allusions to their antecedents were made by their fellow-workmen; and with hardly an exception they have all been reclaimed to society, and have become industrious artizans. Meanwhile M. Bouillon's business prospered; and his sons, who follow

MM. Bouillon.

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in their father's footsteps in building schools, and promoting by every means in their power the well-being of their people, now employ upwards of 300 hands. Mothers and daughters are not permitted to work in the factories, but stay at home and attend to their domestic duties.

Other silver medals.

2. "La Compagnie des Verreries et Cristalleries, de Baccarat, Meurthe." This employs 1,800 hands, and produces glass-ware to the value of 5,000,000 francs a-year. It possesses schools, stores, savings'-banks, sick-funds, and all the machinery of a well-conducted establishment.

3. "M. Menier, Fabrique de Noisiel-Sur-Marne, Seine et Marne," for its "paternal administration and generous solicitude,"—words which, after what has gone before, sufficiently indicate the principles on which it is conducted.

Concluding remarks on French section.

With these three silver medals I shall close this notice of France in Class VII. A few bronze awards and honourable mentions fell to other exhibitors; but no novel features appear among them to call for special observation. There is no doubt that the co-operative movement, both of production and consumption, is making giant strides in France, and French workmen now avail themselves unstintingly of the permission to combine to influence wages, given under the law of 1864. Yet while many a French strike thus legalized occurs, little heed is paid to it by the outer world. If on a small scale, it is generally adjusted, with mutual concession, by the Préfet or Sous-Prefet, on whose impartiality both parties usually rely, and whose non-official action they prefer to the intervention of the official "Prud'homme." If on a large scale, it finds its level when its funds are exhausted; but in neither case are violence, menace, or fraudulent procedure of any kind permitted for a single moment. The ends of justice are best served by prompt measures; an important fact which France appreciates to the full, and which we in England often overlook. In France the arm of the law is strong, and better still, it is bold, while, if not popular, it is at least respected, which is of infinitely more importance to the orderly and hard-working elements of society. Laws should be framed and carried out to protect such elements, rather than to afford immunity to malefactors even of a doubtful shade of culpability.

Germany.

The great German nation next demands attention. Assuredly it will not be found behind its brethren in

CLASS VII.
—People's
banks.

co-operative development, nor in legislative securities against the abuse thereof. In the lists of awards which fell to German individuals and associations in Class VII, representatives will be found of most of the features which we have already described upon the face of civilization in the limitrophe states which bound it on the west so far north as the mouth of the Elbe. Under these circumstances, it will not be necessary to follow up the roll of German successful exhibits so closely as has been done in the case of France, &c., more especially as the principles maintained by the International Jury were the same, and as the people's banks of Germany, the form which co-operation has assumed in that country under the guidance of the skilful hand and head of M. Schultze-Delitsch, are already well known in England,—thanks to the valuable Reports of M. Morier, Secretary of Legation, resident at Darmstadt. These people's banks now number over 1,500, and dispose of 4,500,000*l.* sterling. They exist in every nook and corner of the Fatherland, and are conducted on the soundest of financial principles. Their name is legion, and their action is irreproachable. In addition to these wide-spread credit societies, the co-operation wave has imported into Germany societies of consumption in great numbers and variety, while societies of production are beginning in many places to raise their honest heads. Besides these we find in Germany "Vereins" of workmen of different and of affiliated trades, for promoting education, recreation, and the physical advantages which follow on unadulterated food and the use of fair weights and measures. Of such societies one of the most perfect to be found in Germany is the "Société des Ouvriers" of Berlin. It was founded in 1859, and is composed of upwards of 60,000 members. It was completely spontaneous and unaided from without in its origin, and by its own power, and its own good sense in the selection of worthy objects for the investment of its funds, it has created a singularly complete system of instruction, primary and technical, besides many means of intellectual and social enjoyment, such as reading-rooms, club-rooms, and the like. The laws that control these associations in Northern Germany were, until last June, more severe than those in force in France; and strikes, or the appropriation of funds for their support, were illegal, and punishable by fine and imprisonment. By a recent law, however, the

Berlin Work-
men's Society.

CLASS VII.. Prussian legislation on this subject is practically assimilated to that of France. The "Société des Ouvriers" of Berlin received the highest award the Jury had it in their power to bestow.

Mr. Krupp. While, as is thus seen, the German workman is by no means backward in associative tendencies, large employers of labour in the Fatherland are no less solicitous for the welfare of their hands than in other Continental States. The 10,000 workmen who labour in the monster iron and steel works of M. Krupp, of Essen, in Rhenish Prussia, have nothing to envy in the condition of their brethren in France or Belgium. The number of drunkards is diminished, schools are provided, "caisses de retraite" and "de prévoyance" are encouraged, dwellings are constructed on the most improved principles, wives stay at home and look after their domestic affairs, workmen may retire on half-wages after twenty years' active service, and on full pay after a period of thirty-five years. Bakeries distribute bread 15 per cent. under the trade Tariff, and a sound beer is brewed and supplied at cost price. Finally, presents are annually bestowed on the most meritorious workmen. In this last item M. Krupp spends some thousands of pounds a-year.

Other similar instances.

This, moreover, is no isolated instance. The silk and velvet looms of Baron de Diergardt, at Viersen, the brick-kilns of M. Boltze, at Saltzmunde, the cement works of M. Quistorp, at Lebbin, Pomerania, and the forges of Messrs. Stumm, near Saarbrück, all testify to the same enlightened policy of solicitude for the working-man. Neither is South Germany in these matters behind the Northern Bund. Bavaria and Wurtemberg offer many precisely similar cases; and the homogeneous character of the Teutonic race, from the peaks of the Tyrol to the shores of the Baltic, is strikingly exemplified by the unanimity of treatment these questions meet with from all classes, labouring as well as employing, within those broad territorial limits.

Austria.

Last, though not least, Austria affords no exception to German unity on this score. Vienna, no less than Berlin, has its "Arbeiter" and "Credit Vereins;" while the cotton-mills of Madame Staub, of Küchen, the woollen "fabriques" of M. Liebig, of Reichenberg, and the coal mines and brick works of M. Drasche, all testify that Southern Germany is not behind the Northern Bund in

M. Drasche.

civilization and humanity. The vast establishments of this last-named employer of labour are indeed so remarkable as to demand a brief account. They are scattered broadcast over the Austro-Hungarian Empire, being situated in Upper and Lower Austria, in Bohemia, in Poland, and in Hungary. They employ a total of about 10,000 men, who, with their wives and families, form permanent Colonies, and never quit his service, the development of the mines, &c., absorbing the natural increase of population. The whole 10,000 participate in the advantages derivable from a pension-fund, originally endowed by M. Drasche with 500,000 florins. A second fund of equal magnitude has been similarly endowed by him as a "caisse de secours" for the sick and injured. In addition to this he has built hospitals for his Colonies, and all his workmen receive lodging and fuel gratis, and without reference to their regular wages. He has built for their accommodation upwards of 400 houses. Schools, churches, reading-rooms, clubs, and bursaries, for enabling successful competitors to proceed to the higher schools and universities also exist, and are augmented as occasion demands. These efforts of M. Drasche have contributed to the creation of so general a feeling of contentment among his men, that when, in 1848, other employers of labour were having their factories burnt down and pillaged by their own paid hands, the colonists of M. Drasche formed themselves into armed bands to protect their master's property.

It would be a most interesting study, but one very difficult of prosecution, to go carefully over Europe, and discover by statistics whether such noble examples are more frequently met with on the Continent than in Great Britain. I am not prepared to say off-hand whether such would prove the case or not. Vol. VI of the Reports of the Paris Exhibition of 1867, gives a long list of names assuredly second to none in the domain of practical philanthropy. Such names as Akroyd, Bliss, Briggs, Beaumont, Titus Salt of Saltaire, &c., stand out as monuments of what exists, and of what may be done by Christian treatment on our soil; but these and others equally deserving may disabuse themselves of the belief, if indeed they entertain it, that England stands alone on this highway to better things and to a time when such treatment shall be universal and compulsory by law.

Comparison
between the
Continent and
Great Britain.

CLASS VII. When this goal is reached trade unionism will have no *raison d'être*, and strikes will be as much a matter of history as the wars between the Picts and Scots, or the Red and White Roses.

Scandinavia.

The Northern Kingdoms, faithful to their antecedents in other classes of the Exhibition, were second to none in the quality at least of their exhibits in Class VII. Denmark received the highest awards for its "Arbeider foreningen" and for its "Arbeidernes Byge foreningen" both of Copenhagen. Sweden received a well-merited gold medal for a similar association of working-men at Gothenburg styled "Arbitare foreningen." All these are founded on the soundest of sound principles. Many other things that were good and deserving of close study came from the north to take their place in Class VII, and in almost every case to carry off well-merited awards. The vast iron works and forestries worked by Mr. Dickson at Gothenburg, and on the Gulf of Bothnia, did not escape the attention of the Jury, whose eyes wandered over Europe in search of good and evil; of which two elements it is strictly true to say that the first predominated. Under the superintendence of Mr. Dickson, in the deep gloom of those northern pine forests, schools and churches are erected, the use of strong drinks is prohibited, savings' banks are encouraged, and pension funds are endowed, in the same manner as we have found in France, Belgium, Holland, and the Fatherland, in the remotest gorges of the Black Forest, and in the wide-spreading plains of Hungary.

America.

It is greatly to be regretted that the American Continent was not represented in Class VII, so as to complete the character of the collection therein contained. Although this was unfortunately not the case, yet the position of the social questions embraced in the brief title of Class VII within the limits of the Great Republic, did not escape the observation and discussion of the jury. Tributes were paid to many associations belonging to the New World, to the legislation that controls them, and to the fame of Mr. Peabody, who has united the Old World with the New by perhaps the vastest link of human charity yet forged by the ardent efforts of the nineteenth century.

Finally, the noble works of great Sovereigns, Princes, and Princesses, did not pass unnoticed at Amsterdam; for while nothing was too lowly or too distant to attract the attention of the Jury in Class VII, nothing was too high placed or

too near at hand to escape their criticism or be overlooked. The result of this section of their inquiry was the conferring of "Diplômes d'Honneurs" on three personages who occupy the first and second places in France and Germany respectively; and the claims on which in each case their title to these laurels rested will be found detailed in the following lists of royal and imperial benefactions, contributed to the alleviation of human suffering, and to the rendering of this life less hard to those who work the hardest.

His Majesty the Emperor of the French.

Napoleon III.

For institutions, establishments, and foundations in behalf of the working classes, originated or protected by His Majesty, as referred to in the documents collected and exhibited at Amsterdam by M. Paul Bucquet, Inspector-General of Establishments of Beneficence.

Instruction.—Extension of primary instruction; establishment of 1,904 infant schools, of 10,092 public primary schools. Number of lessons given to adults increased fourteen-fold. License to give public lessons. Foundation of 8,400 school-libraries.

Technical instruction or teaching of handicrafts. Law on this subject. Bill on the employment of children in factories. Decree, by virtue of which mining engineers are charged with the duties of inspectors of children employed in factories.

Training for handicraft; Bill on technical instruction.

Subsidies.—Foundation of the Asile Impérial de Vincennes for convalescent working-men (11,000 admissions per annum), 1855. Foundation of the Asile des Convalescents de Lamothe Sanguin for the working men of Loiret (1868). Foundation of the Asile Impérial de Vesinet (1855) for convalescent working women (6,000 admissions per annum.)

Institution for the treatment of the sick at their own homes (1853). Re-organization of medical attendance, free of charge, to agricultural labourers (1853) (232,000 persons of this class availed themselves of it in the year 1867).

Foundation of the Hospital Plombières, of hospital beds, of the Refuges "Napoleon" in the Hautes Alpes, of the orphan house at Versailles.

Extension of subsidies made by the State; foundation

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of 172 new hospitals, of 3,912 offices of relief; adoption of 34 lunatic asylums and foundation of 28 pauper work-houses; prohibition of begging in 59 departments.

Protection of the Interests and Promoting the Morality of the Working Classes.—Law on legal assistance; abolition of arrest.

Law to facilitate marriages among the poorer classes, on the legitimization of their bastard children and on resuming the care of those children when placed in charitable institutions (1850). Law on emigration (1850). Law on trades unions (1864). Law on public meetings. The oath of the workman to be received in courts of justice (abolition of Article 1781 of the Code Napoléon: the master's oath to be received, &c.)

Bill for the abolition of the law subjecting factory operatives to have a workman's book ("livret").

Improvement of Material Condition.—Dwellings for working-men and small families, established at the cost of the Emperor, viz., Cité Napoléon in Paris, sixteen houses, Boulevard Mazas; one house for unmarried workmen; forty-one houses, avenue Daumesnil; eight houses on the Champ de Mars; three houses at Bayonne, Cité Napoléon at Lille; gifts of 300,000 francs to the Society of Mülhause; Decree assigning 10,000,000 francs for founding houses for the working-classes.

Establishment of public baths and wash-houses at reduced prices, 500,000 francs granted (1853). For effecting sanitary improvements in populous districts. Law on unwholesome dwellings (1850). Forming squares, promenades, parks. Opening, in 1861, of the people's kitchen, called after the Prince Imperial in Paris. Annual subsidy of 100,000 francs given by the Emperor.

Law for the completion of by-roads.

Inquiry into the state of agriculture.

Collection at the Great Exhibition of 1855, of a class of articles for the households of the working-classes.

Collection at the Great Exhibition of 1855, of the 10th group: articles especially adapted to the improvement of the physical and moral condition of the people.

Relief from taxation.—Reduction of the land-tax, of the tariff of imports and exports. Exemption from taxation of dwellings below 200 francs.

Relief from bridge-tolls (11,000,000 francs applied to their redemption).

Extension of gratuitous instruction in schools (1,767,251 children admitted gratuitously).

Institutions for promoting the Acquisition of Property, and for encouraging Economy and Saving.—Increase of wages in consequence of extended public works.

Establishment of workmen's dwellings at Bayonne, with qualification on the part of the workman to become the proprietor, on payment of 300 francs per annum for 15 years (200 francs for rent, 100 francs for the ultimate purchase of the house).

Re-organization of savings' banks. Between 1851 and 1867 increase in the number of depositors 149,295; increase in the amount of deposits 110,705,618 francs 32 centimes. Increase in the number of savings' banks 173.

The balance on hand in the savings' banks was, on June 30, 1867, 404,533,708 francs 59 centimes.

Establishment of savings' banks for old age (1850). From 1851 to 1867, increase in the number of deposits 291,510; in the amount deposited 7,578,571 francs 94 centimes.

The balance on hand was on June 30, 1869, 3,318,257 francs interest, representing 75,717,437 francs 16 centimes invested.

Assurance brought within the Means of the Working-Classes.—Foundation of two public assurance offices: one a life assurance; the other for accidents arising in the course of agricultural or industrial employment (July 11, 1868).

Mutual Support.—Encouragement of societies for mutual support.

Law on the societies for mutual support, July 15, 1850.

Decree devoting 10,000,000 francs to the societies for mutual support.

Subsidy of 500,000 francs to the establishment of pension funds.

From 1851 to 1867. Foundation of 3,592 societies; increase in honorary members, 92,013; increase in ordinary members, 516,310; increase in reserved fund, 36,661,131 francs; balance on hand, June 30, 1869, 169,345,500 francs 72 centimes.

Co-operation. Co-operative Societies.—Foundation by the Emperor of the co-operative society's fund (August 5, 1866).

Discounting securities of the societies of production, of

CLASS VII. mutual credit, of individual workmen. Of 34,171 securities presented, 9,425 are below 100 francs; 17 centimes for every 100 francs discounted.

Gift of 500,000 francs to the funds by the Emperor.

Gift of 300,000 francs by the Emperor for the promotion and establishment of the Weavers' Co-operative Society, at Lyons.

Gift by the Emperor of forty-one houses to the co-operative associations of real property at Paris.

Burial Clubs.—Foundation by the Emperor of "Aumôniers de dernières prières. (Decree of March 21, 1852), charged with gratuitous funeral rites of the poor.

Her Majesty the Empress of the French.

The Empress
Eugénie.

Her Majesty the Empress of the French :—For institutions, foundations established by or under the protection of Her Majesty, as contained in the documents collected M. Paul Bucquet, Inspector-General of beneficent institutions.

Primary and Technical Instruction.—The infant schools, by Decree of March 30, 1854, are placed under the protection of the Empress.

Her Majesty the Empress' founds in 1853, the institution "Eugène Napoleon," by the donation of 600,000 francs presented by the city of Paris to purchase a diamond necklace for Her Majesty, (300 orphan girls receive technical instruction in the institution Eugène Napoleon).

Institution of "Pupilles de la Marine," (1862) 415 pupils, orphans, or children of seamen, received from 7 to 13 years of age

Institution of Popular Lectures ("conference populaires") in the Imperial Asylum of Vincennes (1856). Political Economy. Law. Moral Philosophy. Sanitary Science.

Subsidy or Assistance.—Her Majesty gives 100,000 francs for new beds in the Hospital for Incurables (1853.)

Her Majesty founds the Hospital Eugénie, in the Faubourg St. Antoine, (March 10, 1854): 3,300 sick children admitted annually. Foundation of the "Asile des Convalescents Sainte Eugénie," at Lyons (July 9, 1866).

Protection.—Institutions for neglected and deserted children, foundling hospitals, are placed under the exalted protection of Her Majesty (1853). Gift of 100,000 francs to the societies described above.

Her Majesty has under her protection the "Crèches" (1862), the "Maison Impériale des Quinze Vingts" (1854),

the General Establishment of Beneficence ("Etablissements Généraux de Bienfaisance"), Imperial Deaf and Dumb Institutions at Paris, Bordeaux, Chambéry; the Institution for Blind Children at Paris; the Establishment or Institution of Mont Geneva; the Imperial Asylums at Vincennes, Vesinet, Charenton; the Association for the Protection of Apprentices, and Factory Children (1867); the Association for Assisting and Providing for the Deaf and Dumb, the Schools for Deaf and Dumb, and Blind Children at Paris; the Central Association for Shipwrecked persons (1863),

Mutual Assistance.—The Empress founds associations for mutual assistance in behalf of seamen at Dieppe, Dunkerk, &c. (1859).

Guardianship and Apprenticeship.—Foundation of the Orphan-house of the Prince Imperial (September 1855). Placing orphan children in the families of respectable working-men, apprenticeship, protection of the orphan children (600 orphan children are provided for).

Loan Societies.—Foundation of the association of the Prince Imperial (1862).

Foundation of the credit fund. Loans to workmen for the purchase of tools and materials. Assistance in exceptional and temporary distress of families requiring help: 22,109 loans, to the amount of 6,278,038 francs. Capital invested, March 3, 1869, 2,154,249 francs 48 centimes.

Her Royal Highness Victoria, Crown Princess of Prussia, Princess Royal of Great Britain and Ireland.

Crown Princess
of Prussia.

1. Preliminary steps for establishing the association at Berlin, for enabling women to earn their living ("Erwerbsfähigkeit").

2. Promotion of all the institutions of this association.

3. Much personal trouble in all the undertakings and operations of this association.

4. Union of separate associations to the one already existing, in accordance with a scheme specially contrived, and constant supervision of the working of the same.

The Association for enabling women to earn their living ("Für Erwerbsfähigkeit des Weiblichen Geschlechtes"), has more particularly turned its thoughts, and directed its operations to women of the middle and lower classes, especially with a view to secure to unmarried women a

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better condition than has hitherto been possible, as well as to give married women suitable opportunities of assisting their husbands. The association would wish to attain these results :—

(a.) By discovering suitable situations in commerce, and other vocations.

(b.) By indicating where work is to be procured.

(c.) By giving the opportunity to sell their own work at very moderate prices.

(d.) By instruction in such knowledge as is necessary for the commercial classes, so that women may obtain better employment and improve their circumstances.

(e.) To attain the object referred to in (d) there have been established—

(1.) The Industrial Institution (Gewerbe Institut) for girls at Berlin, under the direction of Professor Clement and under the especial protection of the Crown Princess ;

(2.) The commercial school for girls near Lohff, in which only elementary knowledge will be taught ; and,

(3.) A sale room ("Victoria Bazaar"), where women's work is sold.

(f.) By founding the "Victoria Stift," where single women are provided with lodging at a low charge. A kitchen is attached.

(g.) By the Drawing-school of Schulz and Troschel, accompanied by lectures on art and industry.

(h.) By founding the "Victoria Lyceum," which has for its object the spread of a higher knowledge of art and science among women.

(i.) By regular lectures to be given by the most talented persons in Berlin, so as to promote the objects of the association.

The Crown Princess accords to the pupils of the above institutions, at all times, free admission to these lectures.

(k.) By indicating and presenting productions of industry to serve as models, with a view to improve the taste, by copying these productions.

Before taking leave of Class VII, I cannot refrain from hazarding the opinion that any trades union or co-operative association which should, failing ascertained means of support, make celibacy up to 30 or 35 years of age, and even then, unless a good future could be foreseen, a condition of membership, would render an important

service to society. If it be advanced against such discouragement of matrimony among the young and improvident that a large unmarried population is an element of immorality, I would maintain in reply that the large pauper population, which is the fruit of reckless early marriages among the wage classes, is a yet greater element of immorality, and a fertile source of the worst defects of our civilization. Education is the engine to which we must ultimately look as a cure for improvident marriages ; for among the better and best educated classes of society they diminish with all the regularity of a fixed law ; yet pending the diffusion of education, trades unions have it in their power to conduce towards this end. It is fashionable, I know, to point to population as a source of wealth and strength, but it is really not so unless the resources for its support develop with its own increase, and in the same ratio. In Great Britain this has ceased to be the case, and our increase of population now seeks refuge in emigration, goes to swell the Fenian ranks or other buccaneer associations, or raises the poor-rates if it stays at home, thus only tending to impoverish us in time of peace, and embarrass us in time of war or complication. This is the case that is alleged to have occurred in Java, where its fruits are beginning to be severely felt. The rice-fields being circumscribed in order to promote the growth of Government coffee for export, and the population having greatly increased, the rice-fields are necessarily divided among more families. Meanwhile the rice imported by Government is insufficient to make up the difference. Each family thus gets less, or inferior food, and consequently seeks other paths, if not to fortune, at least to daily bread. Experience is beginning to teach that these paths are not always, nor indeed often, those of honesty or loyalty.

I am well aware that the indolent Asiatic cannot be compared to the industrious Anglo-Saxon, any more than the limitation of the rice-fields of Java can be compared with actualities at home. Yet the broad features are the same. The land cannot be made to produce more sustenance, the mills and mines are full of hands and have no room for more ; meanwhile the population increases, and the results in the one case will resemble the results in the other. In both cases growth of population means no longer growth of wealth, but growth of poverty and of the

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poor-rates. I venture to submit this view of the position to trades unions, who, by applying checks to the improvident growth of the population, would probably attain their end of keeping up the price of labour better than by the cut-throat means to which they now resort.

This heaping up of population in Great Britain, or in Java, or wherever it occurs, is the source of nearly all the greatest difficulties the nineteenth century has to cope with. In our own islands it has become intensified at the centres of our industrial wealth,—in London, Manchester, Liverpool, Glasgow, Paisley, Coventry, and the like; and until some means are found to drain off the surplus population and distribute it where it is better able to support itself, the efforts of philanthropists in erecting “*cités ouvrières*” and in opening great markets—in other words, in alleviating the hard lot of the heaped-up population, but really only rendering it possible for it to heap itself up still more, however meritorious and munificent of themselves,—by no means strike at the root of the evil. Hence it is with great satisfaction that those who appreciate the evils of this state of things have learnt that the trustees of the latest Peabody gift have awarded preference to building on suburban sites within a ten-mile radius of London, thus laying the first pipes of a drain for carrying off to realms of purer air and less condensed distress the surplus population of the metropolis. It is probable that when this want of vital drainage is better understood, some machinery, Governmental or the reverse, may be invented for effecting what is needed, and that, a decade or so hence, the powers who rule may invent or further some system of inspection and surveillance of the poorest classes of urban society, having for its object the removal of labour from where it is not required, and unable to find fair wages or befitting accommodation, to such points of Great Britain or her dependencies as stand in need of it, or are at least more capable of supporting it.

That such an agency is needed none will deny, though how far it is possible to create it the future must decide; meanwhile, no one possessed of the ordinary reflective powers with which we are endowed can contemplate the social position of the nineteenth century without arriving at the conclusion that no Government performs its proper functions, and no administrative organization, however perfect otherwise, is possessed of the highest claim to the

epithet enlightened, that does not strive to conquer and divert into self-supporting channels the stagnant waters of society, that are daily growing more stagnant and more difficult to deal with.

CLASS VII.

CONCLUSION.

CONCLUSION.

Having now followed the Exhibition through the seven classes into which it was divided, it is important to learn on what principles the Jury work was conducted. An Exhibition Jury has hitherto been appointed on one of two methods; by Decree or by election: if the former, by Decree of the Sovereign, the Minister, or the personage charged with the Presidency of the Exhibition *ex plenitudine potestatis*; if the latter, usually by the exhibitors, and sometimes from among themselves. In the case of Amsterdam, as has been seen, the International Jury for deciding awards was appointed by Royal Decree of the King of the Netherlands, a course in accordance with most of the more important exhibition precedents. The Minister of the Home Department was charged with the execution of the Decree, and under his authority a code of regulations for the guidance of the Jury was speedily issued. As this document was the Commission, as it were, which constituted the Central Jury, or *imperium in imperio*, a revising Court for criticizing the decisions of the Class Juries, of whose action several complaints have found their way into the columns of the daily papers, I here transcribe it *in extenso*. It consisted of 18 Articles, viz:—

Article 1. Les membres du jury sont repartis en sept classes, suivant l'ordre de celles où les produits sont exposés. Jury regulations.

“ Art. 2. Le Jury de chaque classe nomme son Président, son Secrétaire, et son Rapporteur.

“ Art. 3. Les produits sont jugés exclusivement au point de vue de leur importance, pour les besoins matériels et moraux des classes ouvrières, sans distinction de nationalité.

“ Le Jury aura principalement à tenir compte du bon marché de la production et du bas prix de la vente.

“ Art. 4. Les récompenses mises à la disposition du Jury sont les suivantes:—

“ 1. Grands Diplômes d'Honneur.

“ 2. Médailles de première classe.

“ 3. Médailles de seconde classe.

“4. Médailles de troisième classe.

“5. Mentions honorables.

“Les produits qui ne rempliront pas les conditions indiquées à l'Article 3 pourront cependant, s'ils le méritent sous quelque rapport, être, l'objet d'une mention extraordinaire.

“Art. 5. Des médailles de troisième classe ou des mentions honorables pourront être accordées aux co-opérateurs des exposants, qui auront reçu des diplômes d'honneur ou des médailles de première et deuxième classes, mais seulement sur la proposition de ces derniers.

“Art. 6. Les membres des Jurys de Classe sont autorisés à s'adjoindre des experts pour se faire éclairer individuellement.

“Art. 7. Si pendant les opérations d'un Jury de Classe, le besoin d'éclaircissements plus précis se fait sentir, le Comité Central de la 'Société pour l'Encouragement du Travail Industriel et Manuel des Pays-Bas' ('Het Hoofdbestuur der Vereeniging ter bevordering van Fabrieks-en Handwerks nijverheid') nommera un ou plusieurs experts, qui seront tenus à rédiger un rapport. Les noms de ces experts pourront être tenus secrets.

“Art. 8. Chaque Jury de classe fournira un rapport détaillé et motivé, où seront consignés les avis émis par la minorité aussi bien que par la majorité au sujet des décisions prises.

“Ce rapport devra contenir :—

“1. L'énumération des produits dont on aura reconnu la falsification ou la mauvaise qualité.

“2. Les rapports des experts.

“3. Les propositions des récompenses avec indication des produits et de l'ordre de la récompense demandée pour chacun d'eux.

“Ce rapport sera transmis au premier Secrétaire du Jury avant le 9 Août.

“Art. 9. S'il s'agit de récompenser un exposant qui vend au détail, le prix de vente des produits devra figurer dans le rapport du Jury de Classe.

“Art. 10. Les rapports du Jury seront tenus secrets jusqu'à la publication qui en sera faite par le Gouvernement.

“Art. 11. Les membres du Jury éliront pour chaque nation un délégué, afin de former, sous la direction du Président du Jury, un Jury Central, auquel sera adjoint un Secrétaire Spécial.

“ Art. 12. Le Jury Central, après examen, ratifiera sans réserve les récompenses proposées par les Jurys de Classes, excepté dans les cas suivants :—

“ 1. Lorsqu’il aura été constaté que le produit proposé pour une récompense ne remplit pas le but de l’Exposition, ou que la récompense aura été proposée avec une moindre sévérité que celle qui a présidé aux décisions des autres classes. Dans ce cas la décision sera prise par le Jury Central.

“ 2. Lorsque le Jury Central trouvera le jugement des Jurys de Classes insuffisamment motivé. Dans ce cas des éclaircissements plus précis seront demandés. Si ce dernier moyen n’est pas encore reconnu suffisant, le Jury tout entier sera convoqué pour statuer.

“ Art. 13. Le Jury Central admettra des réclamations, de quelque part qu’elles viennent, dans le seul cas où il sera prouvé par les intéressés qu’il y a eu erreur par des causes indépendantes du Jury.

“ Art. 14. Aussitôt que les récompenses dans une classe auront été décidées, on composera un tableau donnant les noms et la résidence des lauréats ainsi que la nature des produits qui seront l’objet de la récompense.

“ Ce tableau sera expédié au Ministre de l’Intérieur, pour être inséré au Journal Officiel (Staats-Courant).

“ Art. 15. La rédaction du Rapport Général sur les travaux du Jury est confiée au Président et au premier Secrétaire.

“ Le Rapport Général contiendra comme annexe des notes critiques rédigées par chacun des membres du Jury Central, formant une étude comparative des produits et des procédés industriels reconnus les plus appropriés dans son pays au développement d’une classe spéciale d’ouvriers, ainsi que de ceux qui dans les sections étrangères lui auront paru les plus dignes d’être avantageusement introduits dans son pays.

“ Art. 16. Les membres et le Secrétaire du Jury Central, ainsi que le premier Secrétaire, ont le droit d’assister à toutes les réunions des Jurys de Classes.

“ Art. 17. Les membres suppléants ont droit d’assister aux visites du Jury. Dans les assemblées des Jurys de Classes ils ont voix consultative seulement.

“ Art. 18. Quand il y aura ballottage dans un Jury de Classe, le Président de ce Jury décidera du dernier ressort,

“Quand il y aura ballottage dans le Jury Central, le Jury entier sera appelé à décider.

“En cas de dernier ballottage le sort décidera.”

The Class
Juries.

The seven Class Juries into which the International Jury became divided under the above code of regulations, were composed as follows:—

CLASS I.—Dwellings.

Mr. Cohen, President.
Capt. Dashwood, Vice-President.
M. Mondron, Reporter.
M. Berger, Secretary.
M. David.
M. Smidt Van Gelder.
M. Veth.
Le Chevalier de Wertheim.

Supplementary Members.

M. Chapon.
M. Worlizek.

CLASS II.—Furniture.

M. Tetterode, President.
M. Aimé Girard, Vice-President.
Dr. Rose, Reporter.
M. O. de Kerchove de Denterghem, Secretary.
M. Hermans.
Mr. Johnson.
Le Chevalier de Liebig.
M. Stobwasser.

Supplementary Members.

M. Ed. Kanitz.
M. Mourceau.
M. Serrurier.

CLASS III.—Clothing.

M. Grön, President.
M. Kruseman Aretz, Vice-President.
M. Carcenac, Reporter.
Mr. Al. Wolff, Secretary.
M. L. d'Andrimont.
M. Eigeman.
Mr. Simmonds.
M. Strakosch.
Le Chevalier de Liebig.

Supplementary Members.

M. Grasveld.
M. Duvelleroy.
M. Worlizek.

CLASS IV.—*Food.*

M. Raeymaeckers, President.
M. Gilka, Vice-President.
Dr. Mouton, Reporter.
Dr. Vrolik, Secretary.
Dr. Gunning.
Mr. Halphen.
Mr. Simmonds.
M. Strakosch.

Supplementary Member.

M. Ed. Kanitz.

CLASS V.—*Implements.*

Le Chevalier de Wertheim, President.
M. Martelet, Vice-President.
Mr. J. Gillon, Reporter.
M. J. Van den Wall Bake, Secretary.
M. Buddingh.
Dr. Grothe.
M. Hartsen.
M. Jensen.

Supplementary Member.

M. Ed. Kanitz.

CLASS VI.—*Instruction and Recreation.*

Baron de Watteville, President.
M. A. van Camp, Vice-President.
Dr. Kreenen, Reporter.
Dr. Van Oven, Secretary.
Mr. Hodgeson Pratt.
Dr. Rive.
M. Strackee.
Le Chevalier de Wertheim.

Supplementary Members.

M. Bauernschmidt.
M. Braet V. Ueberfeldt.
M. Armand Desmaresq.

CLASS VII.—*Trades Unions and Co-operative Associations.*

Hon. T. J. Hovell Thurlow, President.
M. Donnat, Vice-President.
M. Clerfeyt, Reporter.
M. Pfaff, Secretary.
Mr. David.
Baron Mackay.
M. Muller.
Le Chevalier de Wertheim.

Supplementary Members.

M. Morillot.
 M. Pareau.
 Mr. Pierson.
 Dr. Sax.
 M. L. d'Andrimont.

Central jury.

The Central Jury, with whom rested the responsibility of the final decisions in the adjudging of awards, was elected *inter se* by the jurymen of each country, who chose one of their number, a Frenchman, an Englishman, &c., to represent the interests of his nation; the choice being as much as possible so made, as to insure each class, as well as each country, being effectively represented. The English jurymen had, in the first instance, chosen me to represent their interests; but not having been enabled, as already stated, to take my place upon the Class Juries, I considered it better to devolve the responsibility upon Mr. P. L. Simmonds, who had received from the Lord Mayor permission to style himself the British Commissioner, and who, besides knowledge of the manner in which the class jury work had been performed, brought wide previous exhibition experience to bear upon all doubtful cases. The gentlemen into whose hands all the reins were thus gathered, and upon whom responsibility rests for the ultimate adjudication of awards were:—

Baron D. J. Mackay, President.
 Mr. Simmonds, England.
 M. Martelet, France.
 M. Grothe, Prussia.
 M. Haupt, Austria.
 M. Van Camp, Belgium.
 M. Van den Wall Bake, Holland.
 M. Pareau, Denmark.

M. F. H. Van Notten was requested to act as Secretary to this Central Jury, and the manner in which it performed its arduous task, and the rules by which it was guided, will be gathered from a perusal of the following letter of its President communicating to the Netherlands Government the results at which it had arrived, for publication in the official "Gazette":—

To M. Fock, Minister of the Interior.

Amsterdam, September 29, 1869.

Letter
announcing the
adjudication of
awards.

“Your Excellency,

“The Central Jury of the International Exhibition have the honour to present herewith to your Excellency the report of the distribution of awards to the exhibitors.

“The Central Jury have, as much as possible, maintained the recommendations made by the Class Juries. In any proposal for an award, they have put themselves the question whether the article was directly or indirectly useful to the workman, or if the articles were in all classes judged according to the same standard, and if the nature of the article admitted of a high award.

“All articles that did not answer the object of the Exhibition were placed *hors concours*; considering, however, that many exhibitors belonging to this category, are especially meritorious, a distinction, for remarkable excellence, is conferred on them, of a ‘*diplôme d'excellence*,’ and, for a relatively lower degree of excellence, a ‘*mention extraordinaire*.’

“In several cases exhibitors sent articles which in some respects answered or complied with the requirements of the Exhibition, and in other respects did not; in these cases the Central Jury asked themselves the question, whether the prize should be awarded for what lay within or without the limitations of the Exhibition, and upon the answer to this question depended the nature of the prize. Thus it does not follow from the fact of a ‘*diplôme d'excellence*’ or a ‘*mention extraordinaire*’ being conferred, that the recipient of such distinction sent no articles suited and adapted to the direct object of the Exhibition, the domestic economy, &c., of the working-classes.

“A prize of a lower class may be in some cases the highest distinction, because the nature of the article admitted of no higher distinction, although the workmanship left nothing to be desired.

“In some cases the Central Jury have thought it right to abstain from a decision, namely in those where there was a mooted and undecided scientific question.

“They judged that no honour ought to be conferred on exhibitors, however meritorious, by a premature reward. To give an instance, the Central Jury did not think themselves justified in expressing an opinion on theories of agriculture.

“True to this principle of rewarding only what the Central

Jury could thoroughly judge of, they have excluded from competition other articles,—cements for instance,—whose excellence cannot be tested during the time an exhibition lasts. Nor have raw materials on which the exhibitors have bestowed but little labour, been taken into account.

“The great difficulty there was in defining the limits of the Exhibition induces the Central Jury to take the liberty of adding the remark, that those who had the management of the Exhibition wisely made the range of admission wide, and left it to the Jury to decide in each case what fulfilled the prescribed conditions. By this means, in the humble judgment of the Central Jury, the object of the Exhibition was better attained than if the Committee of Management themselves, without the possibility of calm and careful consideration and deliberation, had sharply defined the limitations. The Central Jury may then, in conclusion, after a thorough examination of all the subdivisions of the Exhibition, declare, that it has perfectly answered its purpose. The general report will further confirm this opinion. The representatives of the foreign exhibitors on the Central Jury wish at the same time to communicate to your Excellency, that, judging from the sales effected by the exhibitors, it may safely be concluded, that, in this particular, the Exhibition will appear to be not without fruit in its consequences to the Dutch consumer.

“The Central Jury trusts that this Exhibition will contribute to an increase in the knowledge of the most suitable ways and means of bettering the condition of the working-man.

“In the name of the Central Jury.

(Signed)

“D. J. MACKAY, *President*.

“F. H. VAN NOTTEN, *Secretary*.”

Value of
Exhibitions,
and of their
catalogues.

It will not escape notice, that in this letter Baron Mackay draws attention to the sales made by exhibitors at the Amsterdam Exhibition, as of sufficient importance, both of themselves as isolated purchases, and in their character of pioneers of new sources of food, clothing, and the like, to render them not unimportant to the Dutch consumer. So far as England is concerned, this is most strictly true; though to what exact extent is not possible of calculation or estimation. On this point, and on the question of how far those who took part in the Exhibition were satisfied with the Jury method followed at Amsterdam, I consulted

confidentially the exhibitors themselves. From the expressions of opinion thus evoked, it appeared generally to be the large firms who confessed to considerable orders, and a belief in future benefits to their business; all concurred in the great value to industry generally of Exhibition catalogues, which, beginning with 1851, form a library of works of reference, in which the progress made in every trade can be clearly traced, and studied internationally. In fact, it is to the permanent value attached to the catalogues that must be attributed the fact that so many exhibitors care more to make a good show in the catalogue which remains, than in the Exhibition itself, which closes in a few months. Another universally acknowledged advantage of Exhibitions and their catalogues, is the opportunity they afford of making inventions widely known. This point is well put in the subjoined extract from a letter addressed to me by Mr. John A. Pols, a successful exhibitor in Class II, who writes under date, October 6, 1869:—

“The experience of this, and many past Exhibitions, proves that they are alike useful to the successful manufacturer, and the struggling inventor; to both of whom international publicity of their names and productions are matters of the greatest importance; and as the latter, in his struggles to perfect his inventions, often expends the whole of his available resources, these exhibitions give them the much-needed opportunity of making known the value, economy, and usefulness of their inventions, in case they wish to dispose of their productions, or to sell their processes.”

Of the nearly 150 replies to my inquiries which I received from exhibitors, it is satisfactory to record, that 50 per cent. in round numbers, expressed themselves fully satisfied with the results of the Exhibition. Now, when it is remembered that about 67 per cent. of the British exhibitors received awards of some kind, it may be presumed that there would remain 33 per cent. of more or less discontented; and when to these is added the contingent of those who got silver or bronze medals, and were dissatisfied because they were not gold or silver, it will be understood that 50 per cent. malcontents is no more than might have been expected from a study of the bare statistics. The lists of contents and malcontents, however, though bearing a natural general relation to the lists of awards, yet displayed many exceptions to what might have

Analysis of
awards.

been expected in this regard ; and by far the major part of the malcontents, recompensed or not, represented small and unimportant houses, whose exhibits, having little to recommend them on the ground of novelty or price, met with little favour from the Jury, or the serious public, who were busily engaged in seeking out new sources of supply, and were not inclined to waste their time or money on exhibition trash or "padding," which nevertheless always carries off, and perhaps justly, a certain share of low awards.

This question of awards is the great stumbling-block of exhibitions. Their per-centage on the total exhibits, deemed necessary to insure what is called the success of an exhibition, has steadily increased since exhibitions were invented ; and if their increase should continue, the date, not far distant, may easily be calculated when every exhibit will receive its medal, or its "mention honorable" or the reverse.

For this evil only two possible remedies exist ; either abandon appreciative tokens of every kind, or hedge them round with a machinery not yet invented, and immaculate. It will be evident to all, even to those least versed in exhibitions, that the former of these courses would be the easiest ; and not the least advantage gained would be the absence of intriguing, on the part of those interested, to be represented on the Class or Central Juries.

Hints for
future Exhibi-
tions.

In the course of studying the Amsterdam Exhibition from all its points of view, I have, therefore, arrived at the four following conclusions :—

1st. The catalogue should be an official publication, and not given as a concession to any publishing house with leave to make its own terms for advertisements.

2nd. Exhibitors should be required to certify that the goods they exhibit are of their own manufacture, and to state the wholesale price.

3rd. Wherever there is a Jury at all, there should be a Central Jury of some kind to revise the awards ; but Class Jurymen should be bound under very heavy penalties not to make known their recommendations, more especially previous to the ultimate publication of awards. In the case of France at Amsterdam, the greatest embarrassment was caused by the premature publication of the Class Jury recommendations before they had been considered by the Central Jury. Many of those who were finally adjudged,

say gold medals, grumbled because they knew the highest award, a "Diplôme d'Honneur" had been recommended by the Class Jury; and some who were left out altogether in the last revision, complained bitterly of Amsterdam and of all therewith connected.

4th. Considering the *rôle* Exhibitions play in commerce, and their increasing frequency, it is desirable to establish some efficient Government control over the part taken in them by each country; and considering the practical tendency of the age, it is desirable that such control should reside rather with the Board of Trade, than with any other Department, such as the Foreign Office, or the Department of Science and Art.

Of all the Jury suggestions addressed to me, one of the most original, and at the same time most practical, came from the great house of Cliff and Son, of Wortley, Leeds, who wrote:—

"Our idea of awards is this. In an International Exhibition let a circular be sent to each competitor as follows:—

"In the absence of your own goods, whose do you consider entitled to most merit—

"For novelty?

"For excellence of manufacture?

"For excellence of material?

"For cheapness combined with durability?

"Then let a Jury as at present formed take all these statements as their guide, and act as a Grand Jury to throw out the Bill, as it were, if they saw any connivance, or reason to alter the judgment of those who ought to be the best judges."

If this plan were followed, I believe we should hear of fewer complaints.

In Baron Mackay's letter to the Minister of the Home Department, transmitting the final list of awards, it is further mentioned that the General Report, that is to say, the Jury Reports, will substantiate his assertion that the Dutch consumer has profited by the Amsterdam Exhibition. Now these reports of the Class and Central Juries, which will ultimately, though not for some months, see the light, and which, not being yet sent in by the several "rapporteurs" charged with their drafting, I have not had the advantage of consulting as I had anticipated,—will be divided into two categories; the first confined to supporting the several recommendations for awards, the second, and far more

Character of
the official
Jury Reports.

interesting, calculating the results in £ *s. d.* on the daily life of the Dutch peasant,—that is to say, ascertaining what possible improvements have been made manifest in the condition of the man working, say at 1*s.* 6*d.* or 2*s.* a day ; from which country he can obtain, at the cheapest rate, the most durable and satisfactory articles of food, clothing, furniture, and the like. On these preserves I shall not poach, more especially as this Report has already exceeded the customary length, and the extent to which special subjects possess a claim upon general readers ; but I cannot abstain from recommending all who may, at the first blush of the Working-Man's Exhibition of 1869, be disappointed that no miracle has been wrought, that stones have not been converted into bread, nor the barren rock made to run with living water,—to delay their criticism for awhile and await the interesting contributions to social science which will ultimately spring from this as yet pent-up source.

Finances and
statistics of the
Exhibition.

On the subject of the finances and other statistics of the Exhibition, I am also precluded from entering, on account of the delay which has occurred in the publication of the official reports. So much, however, is known, that the Exhibition was visited by nearly half a million of people during the three months it was open ; and that, with the aid of a small draft on the guarantee fund, and a Government contribution of 15,000 florins, the receipts will cover the expenditure. This not very favourable balance-sheet is due to the bad terms originally made with the Amsterdam Crystal Palace Company, the owners of the building where the Exhibition was held. In addition to a sum of 40,000 florins, the Exhibition authorities agreed to give up to the company two-thirds of the money taken at the doors ; and the one-third left them proved insufficient to meet the usual miscellaneous items of advertising, printing, &c., to which had to be added, in the case of Amsterdam, the charges on account of building and fitting up suitable accommodation for foreign working-men visiting the Exhibition. The actual numbers of these are not known—the department charged with the management of that subject and the task of reporting on it, having caught the infection of delay, and not yet published the result of their labours.

Close of the
Exhibition.

As all tales, however dull or interesting, have an end, so had the Amsterdam Exhibition. Opened on July 15 by Prince Henry, it was closed on October 18 by Prince

Alexander of the Netherlands, on both occasions in the name of the King; and even as I was bound to give Baron Mackay's opening address, it is no less my duty to take official notice of the proceedings, of the dinners and the fireworks, which closed, as they had inaugurated, the undertaking, by transcribing the following address with which the President of the Exhibition greeted Prince Alexander on his arrival within the building to distribute the awards and declare it closed, in the name of the King his father:—

“Your Royal Highness.

Address to
Prince Alex-
ander.

“I take advantage of this opportunity, in the first place, in the name of the Association for the Advancement of Manufactures and Industry, and in the next place in the name of the exhibitors, to tender to your Royal Highness my respectful acknowledgments for your presence here to-day. It affords us another proof that His Majesty regards with approbation the produce of Dutch industry, as well as the efforts made abroad to supply our requirements.

“Industry is grateful to your Royal Highness for your repeated visits to this Exhibition, and trusts that your Royal Highness will continue to devote attention to this important source of national prosperity.

“The distribution of awards to the successful exhibitors, at the close of this Exhibition, suggests many observations which I will not attempt to bring forward during the short space of time I can venture to devote to addressing your Royal Highness.

“One position, however, it appears to me may boldly be maintained: that a prominent and difficult problem of the present day has been propounded in the capital of this Kingdom in a manner that does no dishonour to our Fatherland. The love of truth and the strength of conviction which in all ages have distinguished the Dutch, have not only made it possible for questions of a delicate nature to be discussed without inconvenient results, but also have enabled persons of discordant and even opposite views, by intercommunication and exchange of ideas, to learn to appreciate each other better, and thus pave the way to closer union. The most antagonistic ideas were represented at this Exhibition.

“The difficult, I might almost say thankless, task of

the Jury led them, as the list of awards indicates, without sacrificing their own convictions, to recognize all that was really good, produced in different ways in various countries.

“It is not now necessary for me to defend the principle adopted by the Central Jury called in to confirm the decisions which had been arrived at. With the greatest conscientiousness they devoted all their available time to the difficult questions proposed to them, and in the judgment of well qualified persons, the best possible use was made of the short period; which, after all, was longer than that which the Class Juries were able to bestow on their examinations. Besides the already difficult task of regulating the scale of awards, the Central Jury had to answer the question as to what did or did not satisfy the workman in the different parts of Europe. The social condition of every country—where these conditions differ so widely—had to be taken into account. In France, for instance, where the wants and requirements of different classes present scarcely any points of difference; or in England, where the ‘skilled artizan’ might be denominated an artist rather than a workman, articles wholly different come under the head of domestic economy from those so classified in the land of the hardy nation which holds the keys of the Sound. The creation of an imaginary international workman, of whom a model could carefully be made according to his supposed position, would therefore have led to no good result. The Central Jury could never have come to any decision had they not simply put themselves the question, Is the article now submitted to us suitable to the workman in any part of Europe? Where such suitability could not be proved, the merit of the exhibitor was recognized; but in another way, and by awards divided into two classes, naturally on a different scale from the estimate of merit divided into five classes.

“The Central Jury rigorously defined the limits of the Exhibition, and kept its object constantly in view. There appear, consequently, on the list of ‘diplômes d’excellence’ and ‘mentions extraordinaires,’ more articles than one would be tempted to look upon as within the scope of the Exhibition than there will be found among the other successful exhibits articles to which a scrupulously exact critic might object.

“Considering that your Royal Highness has already

learnt, in the distribution of awards, what concerns most nearly the domestic economy of the workman, I need not enter on a repetition of the catalogue. I rather crave permission to pause a moment while we consider the instruction it affords us.

"Nobody can any longer doubt that the movement we now witness in all the civilized countries of Europe is the same that was so forcibly expressed long ago by a French king who deserved a less tragical fate. The nations of Europe have instituted in this regard a laudable and formidable competition. They advance by different roads, but their goal is the same. One tries to promote the development of the working-man by a sort of parental care and supervision; another, by leaving him as much as possible to his own unassisted and unfettered resources; a third, by uniting the two systems. The conclusion arrived at by this Exhibition on this important point is in so far encouraging that it has adopted no absolute system, but has recognized that the local conditions dominate the question. A general conviction, however, prevails that a great responsibility rests upon those who lead the way to guard their followers against error and misconception, the necessary results of ignorance.

"The dissemination of sound opinions and correct views has, as Michel Chevalier so distinctly pointed out in the preface to the official Report on the French Exhibition, become a vital question. All that was noteworthy in this Exhibition had that tendency to a greater or a less extent. Philanthropy derives lustre from the dedication to it of noble powers; in the object before us they can even less be dispensed with. If the advanced guard is formed by men of science, well armed, the rear-guard should not be left unarmed. There is fortunately no branch of science conceivable which cannot contribute to the solution of this question; every one encounters prejudices which he ought to try to remove by popularizing the knowledge he possesses. Those who help science to make a step in advance ought also to take care that the principles of their science shall not be misunderstood by the public at large.

"Thus shall we be shielded from the dangerous consequences of recklessness; and prudence and skill, the inheritance of examination, shall be applied to the general benefit and advantage. The thirst for extended knowledge

shall take the place of the desire to ventilate dangerous and untested notions.

"To the man who has carefully examined this Exhibition, and his opinion alone is weighty and valuable, a hundred questions present themselves which make a new and further examination an act of duty and a source of attraction. The great problems of the subsistence of the people, the sanitary question, the welfare and prosperity of the people, and their educational development were here put forth to view, and painful is the thought how much in these matters has yet to be set in order and corrected.

"Now that science and industry, as at this Exhibition, go hand in hand, the prospect is encouraging, and especially in the Netherlands we may look for a future of prosperity when a Prince of the dynasty we love so well gives us a guarantee that the House of Orange places itself at the head of the movement.

"Besides this discovery the Exhibition has brought about the advantage that foreigners who often overlook what is passing in the Netherlands, have been able to convince themselves that the great questions our generation has to solve are here examined and investigated from different points of view with no less interest than they are abroad. We have legitimate cause for satisfaction when visitors from foreign countries confess and declare, without affectation or compliment, that their visit to us has made a deep impression on their minds. When an eminent and accomplished statesman, chary of his expressions of satisfaction, told us that the Amsterdam training school for workmen and the industrial school for girls had aroused within him a spirit of emulation, there was implicated in this avowal more than a compliment; we saw in it an encouragement to persevere, a stimulus to advance. We rescued our Fatherland from the billows of the ocean, we must make it safe against the inroads of ignorance. Though an exhibition can contribute to this end, something more—constant exertion—is required. We did not intend, by this Exhibition, to set up a thing which would be unproductive when it was over. No, your Royal Highness must allow me boldly to declare that we have a lively conviction that this Exhibition will elicit new developments. We wish our Fatherland to be at the head and remain at the head of every grand movement of our time. From what we have seen here we may

foretell that an exhibition like this, ten years hence, will be no less remarkable, and that it will bring forward many new points of view. Our country must then also occupy a worthy place. But to attain such a place a very great deal will be required.

“The giant strides of activity, which we notice everywhere around us, must spur on our countrymen to unabated diligence. Expectations of great things are entertained, for the estimate formed of us gives rise to them. In this contest industry and commerce may lay claim to general and powerful support. No doubt foreign capital is at our command, but Dutch capital must not keep aloof. The great undertakings that take advantage of the favourable physical conditions of our Fatherland, in which we must no longer content ourselves with being in name only on a par with the most favoured parts of the world, ought to have—yea, claim—the approval of our capitalists.

“Not only at exhibitions do we wish to see the products of foreign invention displayed; on the wharves of Dutch harbours we will give them the benefit of the prosperity which they will spread around. Now, if ever, is the time for the development of our trade. We cannot neglect our opportunities with impunity. If we have but roused a consciousness of this state of affairs, your Royal Highness may be assured that we shall consider ourselves richly rewarded for the work we have done. We shall never forget what an important part foreign industry, foreign diligence and ingenuity, side by side with our native products, have played in the success of this Exhibition. We are deeply grateful for the marks of confidence thus afforded us.

“In the first place we would express our hearty thanks to the foreign Commissioners and to the foreign Jurymen, as well as to our own countrymen, who afforded us, without exception, all possible sympathy and co-operation. In what foreigners have exhibited and in the ideas they have imparted to us, there is undoubtedly much from which we may derive profit and advantage. The opportunity of conferring with their honoured visitors was to the Dutch Commissioners and Jury as agreeable as it was instructive.

“Without the foreign and Dutch exhibitors all the exertions of the Commissioners and Jurymen would have been in vain; and although it was impossible for us to give every one an award, all may feel confident that their names

and good intentions will remain fresh in our recollections. For the regularity and good order which distinguished the Exhibition, we are, doubtless in a great measure, indebted to the precautions so judiciously taken by the various Local Committees; all their efforts, however, would have been fruitless had not the Dutch workmen—and we were visited by 50,700 of them—proved that they were well worthy of what was intended for their benefit and advancement.

“It was especially gratifying to us to observe that, in almost all parts of the country, people were found ready and willing to make the visits of working-men profitable to them, by putting their more extended knowledge at the disposal of our much esteemed visitors of the working-class. We embrace this opportunity publicly to express to them our warmest acknowledgments.

“Dutch workmen showed the value they set on this Exhibition,—may it continue to be for them of permanent utility! The more interest society takes in their condition, the greater is their responsibility. Let them understand our object; let them take counsel with those who know best how to promote their interests; let them shun those who would seduce them to courses in the end injurious to themselves. Without exertion, without persevering assiduity, prosperity is unattainable for them, just as it is for most other members of society, and adversity will sooner or later teach them rightly to appreciate what they once disdained.

“Submission to authority and law is for them, as for all others, the only guarantee of success and of the sympathy which is so willingly extended to them. In their increased prosperity may they never take occasion to frame unreasonable demands, but may they look back, and trace what has been the source of their success. The Exhibition of 1869 belongs to history. As to its shortcomings, as well as its favourable features, we are perhaps not impartial enough, we are too much interested to present either of them fairly. Was the principle, however, to which it conformed practical? This is a question for posterity to answer. Will society, by drawing different classes into closer union, strengthen its foundations, or shall estrangement still further widen the present separation? This is a serious question and can have but one solution.

"On this we are resolved, that no disheartening prognostications (and when were they ever wanting?) shall keep us from devoting our best energies to the task before us.

"The great founder of the dynasty of your Royal Highness had no misgivings concerning the future. May this Exhibition afford a proof to foreigners, as well as to our own countrymen, to our contemporaries and to posterity, that the sons of those who were privileged to curb and to repel a foreign tyranny will not hang back when they may be exposed to similar dangers.

"May the medal of this Exhibition, wherever it is displayed, be the symbol of this endeavour.

"If an armed peace is the characteristic of the present day, from what arsenal shall we bring out weapons to bid defiance to all time? From the arsenal of industry, art, and science. The nation that knows how most to augment the number of these arsenals, will bear the palm of victory. With your Royal Highness, we cherish the hope that the weapons here forged will contribute to assure to our beloved country the blessings that Providence has never withheld, whenever it assumed the manly and independent tone to which our whole history is a stimulus and encouragement.

"The present contest is over, and we now go back to the battle of life.

"May the motto for the battle in which every one of us can assure himself of victory, be now and always henceforth—

"LUCTOR ET EMERGO."

To this Address Prince Alexander replied in the following speech, delivered with a power, dignity, and force of conviction far beyond his years:—

"Gentlemen,

"Honoured by the confidence of His Majesty the King, and called upon by him to close this Exhibition, I am here to rejoice with you at the good results of the undertaking; and I cannot refrain from testifying my grateful thanks to you for the hearty way in which you have received me.

Prince Alexander's reply.

"I hope and trust that the beautiful example set by the capital of the Netherlands will find imitation elsewhere,

and that it will especially contribute to the welfare of the industrious working-class, whose interests are so dear to the hearts of us all.

"My wish is that by such means a friendly intercourse should be brought about and established between the workmen of different countries, and that the Exhibition of 1869 may leave behind a pleasant and enduring remembrance with us all.

"In conclusion, let us express our deep sense of obligation to the Home and Foreign Committees for their valuable assistance, and our sincere thanks to the honoured exhibitors who made our undertaking so attractive and successful.

"In the name of His Majesty the King I declare the Exhibition closed."

Results.

All who have laboured through this somewhat long Report, will naturally ask themselves, when arrived at this last halting-place, and before taking leave of the Amsterdam Exhibition, what have been its practical results?

To this very proper and most useful question I have no hesitation in replying that, in Holland, where it has literally taught the working man what to eat, drink, and avoid, and wherewithal he may best be clothed, its results have already been considerable, and will become day by day more apparent. To quote but one instance, and one that will react usefully on Great Britain in these days of widespread distress and general despair at the decline of trade, a cry of satisfaction arose at Amsterdam from the Dutch artizan at the opportunity afforded of comparing side by side the tools of England and their Belgian imitations, of which some do not even stop short of counterfeiting the trade-marks of our best-known Sheffield houses. The result of this comparison is generally admitted to have been in favour of British cheap hardware over continental articles, with a disputed superiority on our side in the case of the very first qualities. More than one Dutch carpenter informed me triumphantly that his study of the two would enable him henceforth to distinguish the real article by its make and general cut from the crafty imitation.

With many other articles it was the same; and this, indeed, is one of the special uses of exhibitions, the peculiar value of that at Amsterdam being that it was

principally composed of the very articles which those attracted to it were best qualified to judge as experts.

To Holland this Exhibition has further rendered service by breaking down the barriers of prejudice and fear which existed in the minds of many, effectually closing the approach to dealing with several social questions on which legislation has been deferred from time to time since 1855, and which are now beginning to press for a solution.

A second general result of this Exhibition of 1869, and one of which we have yet to reap the fruits, is the impulse it has given on the Continent to the Workmen's Exhibition of 1870, and in their mutual relation to each other it is probable that not one of the least of the benefits conferred by the former on the latter will be the manner in which, by its very defects, it has buoyed out, as it were, the road for its successor, pointing out the stumbling-blocks and pitfalls which beset the fair accomplishment of every *bond fide* philanthropic achievement of wide dimensions.

A third result, in which all contributing countries will participate, is the light thrown on the profits of the retail trade. At Amsterdam, it was possible to arrive at a comparison of the wholesale and retail prices of about 65 per cent. of the exhibits, and it need not be said that the opportunity was not neglected by those who appreciated the value and interest of the occasion, and were concerned in the issues of the inquiry.

A fourth result is the moral to be drawn from the action of the Jury in Class VII. This Jury was composed of men chosen on account of their fellow-feeling and sympathy with the co-operative movement as a lever for raising the condition of the working-classes; and this international tribunal confirmed, without a single dissentient voice, the verdict of the civilized world against trades unions in the Sheffield saw-grinders' and Manchester bricklayers' sense of the term. Let us hope that this judgment, endorsed as it will be by all who love personal liberty and public order, will lend weight to the Legislature of such countries as have not yet followed the wise example of France; and that in legalizing trades unions as such, but not as superior to the penal code, they may not neglect to provide stringent legal enactments to limit and define their power of arbitrary rule, thus rendering impossible future repetitions of the rattening and picketing system, which is more destructive to the liberty of the subject in a country

governed as ours is, than even the repeal of the vaunted "Habeas Corpus Act" would be.

Defenders of the odious practices thus branded at Amsterdam attribute the decline of trade to trades unions not being yet international; but, whether true or false, their theory will be many years before it is disproved by actual fact, for a very long time will happily elapse before the despotisms and strong Liberal Governments firmly established on the Continents of Europe and America will legalize, or permit of a place being occupied in the statutes or the acts of a trades union, by picketing, intimidation, and rattening—those singular forms of civilization which have grown out of an exaggerated respect for the liberty of association as opposed and superior to the liberty of the individual—and without whose assistance international trades unionism would remain as unproductive as it now is of benefit to British industry, and powerless to perform the utopian services expected of it.

In conclusion, I beg leave to say that I approached the study of these questions, thinking manhood suffrage and a "People's Parliament" possible remedies for trades unions, since, if they returned their own representatives to serve in Parliament, they might fairly be expected to trust to the attainment of their ends by legislation; but I quit the subject under discussion, firm in the belief that such extended suffrage would only lead to internecine war between Coventry and Manchester,—between protection and free trade; and that, therefore, working-men are, at least as yet, utterly unable to legislate in the national interest on trade questions. Time must show whether such moral competence may ultimately develop itself in accordance with the physical laws which regulate the demand and the supply. That it may do so I do not deny; but I do maintain that, judging from the specimens before us of working-men's legislative tendencies as displayed in the arbitrary and suicidal statutes of their own trades unions, it is abundantly well proved that no ground exists for the belief that the interests of civilization or of national prosperity would be advanced by the sudden promotion of the working-man—the common sailor—to the chief command in the vessel of the State.

(Signed) T. J. HOVELL THURLOW.

The Hague, January 7, 1870.

United States.

*Report by Mr. Ford, Her Majesty's Secretary of Legation,
on the Finances of the United States.*

Washington, December 28, 1869.

THE inauguration of General Grant to the Presidency was hailed by a vast majority of Americans as the commencement of an era that was to bring increased efficiency in the conduct of public affairs.

The new administration was expected to effect a reduction of expenditure, an economy in the disposition of the public revenues, and a much needed reform of the Civil Service.

The brief period that has elapsed since the installation of the present Government has been attended by very satisfactory results.

Thus during the last ten months the public debt has been reduced by upwards of 10,000,000*l.*

During the fiscal year just ended an excess of upwards of 9,000,000*l.* was shown of receipts over expenditure, and during the first quarter of the present fiscal year an excess amounting to 4,260,000*l.*

It is estimated that for the three remaining quarters of the fiscal year ending 30th June, 1870, the excess of receipts over expenditure will amount to 13,660,000*l.*, and for the fiscal year ending 30th June, 1871, to upwards of 18,000,000*l.*

The Government, moreover, holds at its disposal a reserve of coin amounting to about 5,750,000*l.*

The collection of the Internal Revenue has been conducted with an honesty of purpose that has resulted in considerably augmenting the national wealth.

During the last six months of the fiscal year just ended a gain of upwards of 4,000,000*l.* was made over the corresponding six months of the preceding fiscal year from

the same general sources of revenue taxable under existing laws.

A vast reduction of the staff of subordinate officials has been effected without impairing the efficiency of the public service.

In short, it must be admitted that the country is in the apparent enjoyment of a high state of prosperity; and the needy classes (presuming that such do exist in it) are seldom heard of, and are still less seldom met with.

It would be idle, however, to suppose that the burdens inflicted by the late war have ceased to be felt; indeed, the reverse is the case, and the continued imposition of a heavy load of taxation is rendered obligatory, mainly owing, it must be said, to the desire of carrying out a policy, so characteristically American, of extinguishing the National Debt within a comparatively short period of time.

To devise a practical plan for counteracting the evils entailed by an inconvertible currency is a problem the solution of which still baffles American statesmanship, and the prevalence of a belief is gaining ground that legislative action is less to be relied on than the gradual development of the marvellous resources of the country as a means of rescuing the nation from the incubus of financial difficulties such as would suffice to plunge any less favoured land into a state of hopeless bankruptcy.

The following is a statement of the public debt as it stood on the 1st December, 1869:—

The amount of accrued interest on the coin bearing interest bonds is included in it, as it forms as much a part of the debt as does the principal of the bonds itself.

The sum of 9,400,000*l.* that has been issued by the Government in aid of the Pacific railroads is not included in the debt statement.

The present Secretary of the Treasury is sanguine of the ability of the railway companies to redeem their promise of repayment, and is therefore inclined to regard this heavy item of expenditure more in the light of a loan than as a debt contracted by the Government.

Two denominations of value are used in this country, viz., the paper dollar (currency) and the gold dollar (coin). The receipts from customs and the payment of the interest on the national debt, as also payments made on account of the foreign intercourse of the Government are made in

coin. The other receipts and expenditures are made in paper dollars (currency).

In the official accounts published in this country all items of expenditure and receipt, be they made or received in currency or in coin, are indiscriminately cast in the totals under the one denomination of coin. A paper dollar is professedly reckoned as a gold dollar, and no notice is taken of the depreciation of the former.

With a view, however, to greater accuracy, and following the rule adopted in the report on the finances of this country submitted last year, all sums referring to currency receipts or expenditures have been converted into their equivalent amounts in English money at the current price of gold, the average rate of which during the last fiscal year was 133; and all sums referring to coin, receipts, and expenditures, have been reduced to English money at the rate of five dollars to the *l*.

The current price of gold during the fiscal year ended 30th June, 1868, was at the rate of 141, at which rate all amounts referring to that year have been converted into their equivalent amounts in English money.

STATEMENT of the Public Debt of the United States, December 1, 1869.

Debt bearing Interest in Coin.

Authorizing Acts.	Character of Issue.	Rate of Interest.	Total Outstanding.	When Redeemable or Payable.
		Per cent.	£	£
June 14, 1858	Bonds	5	4,070,000	Payable after 15 years from January 1, 1859.
June 22, 1860	Bonds	5	1,404,000	Payable after 10 years from January 1, 1861.
February 8, 1861	Bonds, 1881	5	3,685,000	Payable after December 31, 1880.
March 2, 1861	Bonds (Oregon), 1881	6	180,000	Redeemable 20 years after July 1, 1861.
July 17 and August 5, 1861	Bonds, 1881	6	37,853,320	Payable, at option of Government, after 20 years from June 30, 1861.
February 23, 1862	Bonds (5-20's)	6	102,954,320	Redeemable after 5 and payable 20 years from May 1, 1862.
March 3, 1862	Bonds, 1881	6	15,000,000	Payable after June 30, 1881.
March 3, 1862	Bonds (10-20's)	6	38,773,460	Redeemable after 10 and payable 40 years from March 1, 1862.
March 3, 1862	Bonds (5-20's)	5	95,112,500	Redeemable after 5 and payable 50 years from November 1, 1864.
June 30, 1862	Bonds (5-20's)	6	40,665,450	Redeemable after 5 and payable 20 years from November 1, 1865.
March 3, 1865	Bonds (5-20's)	6	66,590,700	Redeemable after 5 and payable 30 years from July 1, 1865.
March 3, 1865	Bonds (5-20's)	6	75,918,080	Redeemable after 5 and payable 30 years from July 1, 1867.
March 3, 1865	Bonds (5-20's)	6	8,507,570	Redeemable after 5 and payable 30 years from July 1, 1868.
Aggregate of debt bearing interest in coin		...	£ 421,567,600	0 0

Debt bearing Interest in Lawful Money.

Authorizing Acts.	Character of Issue.	Rate of Interest.	Total Outstanding.	When Redeemable or Payable.
		Per cent.	£	£
March 2, 1867, and July 2, 1868	Certificates	...	7,096,992	On demand.
July 23, 1868	Navy pension fund	3	2,106,263	Interest on applicable to payment of pensions.
Aggregate of debt bearing interest in lawful money		...	£ 9,203,255	12 9

STATEMENT of the Public Debt of the United States, December 1, 1869.—(continued.)

Debt on which Interest has ceased since maturity.

Authorizing Acts.	Character of Issue.	Rate of Interest.	Total Outstanding.	When Redeemable or Payable.
		Per cent.	£ \$ d.	
April 15, 1849	Bonds	6	902 6 1	Matured December 31, 1862.
January 28, 1847	Bonds	6	2,127 16 5	Matured December 31, 1867.
March 3, 1848	Bonds	6	2,127 16 5	Matured July 1, 1868 (9 months' interest).
September 9, 1850	Bonds (Texas indemnity)	5	32,890 19 6	Matured December 31, 1864.
Prior to 1857	Treasury notes	1 mill to 6	1,581 9 11	Matured at various dates.
December 28, 1857	Treasury notes	5 to 6½	360 18 0	Matured March 1, 1859.
March 9, 1861	Treasury notes	6	468 14 5	Matured April and May 1863.
July 17, 1861	Treasury notes (3 years)	7½	4,631 11 7	Matured August 19 and October 1, 1864.
March 3, 1863	Treasury notes (1 and 2 years)	5	44,037 16 4	Matured from January to April 1, 1866.
March 3, 1863	Certificates of indebtedness	6	1,804 10 3	Matured at various dates in 1866.
March 3, 1863	Compound interest notes	6	579,130 6 0	Matured June 10, 1867, and May 15, 1868.
June 30, 1864	Temporary loan	4, 5, and 6	27,392 9 7	Matured October 15, 1866.
June 30, 1864	Treasury notes (3 years)	7½	123,761 17 7	Matured August 15, 1867, and June 15 and July 15, 1868.
June 30, 1864 and March 3, 1865			0 1 8	Difference.
Aggregate of debt on which interest has ceased since maturity...			£ 645,417 10 8	

Debt bearing no Interest.

			£ \$ d.
July 17, 1861	Demand notes	...	17,031 7 0
February 12, 1863	United States' legal tender notes	...	53,533,834 11 9
February 22, 1863		...	
July 11, 1863		...	
March 3, 1863	Fractional currency	...	5,847,453 4 8
July 17, 1863		...	
March 3, 1863	Certificates for gold deposited	...	5,543,299 7 0
March 30, 1864		...	
March 3, 1863		...	
Aggregate of debt bearing no interest			£ 64,941,618 10 5

RECAPITULATION of Statement of the Public Debt of the United States.

	Amount outstanding.	Accrued interest.	Totals.
	£ s. d.	£ s. d.	£ s. d.
Debt bearing interest in coin—			
Bonds at 5 per cent.	44,317,860 0 0		
Bonds at 6 per cent.	377,269,740 0 0		
Total	421,587,600 0 0	8,264,097 2 1	
Debt bearing interest in lawful money—			
Certificates at 3 per cent.	7,096,992 9 7		
Navy Pension Fund at 3 per cent.	2,106,263 3 2		
Total	9,203,255 12 9	233,780 0 0	
Debt on which interest has ceased since maturity—			
Total	645,417 9 0	111,701 3 7	
Debt bearing no interest—			
Total	64,941,618 10 5		
Total Debt, principal and interest, including coupons due not presented for payment...			504,965,469 17 10
Amount in the Treasury—		£ s. d.	
Coin		21,193,989 9 5	
Currency		1,774,861 19 11	
Sinking Fund, in United States' coin, interest, bonds, and accrued interest thereon		4,083,205 2 0	
Other United States' coin, interest, bonds purchased, and accrued interest thereon		11,297,241 2 0	
Total		38,349,287 15 4	38,349,287 15 4
Total Debt, less amount in the Treasury			466,617,182 4 6

It will be observed that the sum of 21,193,989*l.* is stated as "coin in the Treasury," and that amount is deducted from the total of the debt.

It would be erroneous to infer that that sum is really owned and at the disposal of the Government. The following sums must be deducted from it:—

	£
1. Property of depositors held in trust to pay their certificates	7,372,588
2. Property of holders of coupons over due, but not yet presented.	1,613,514
3. Interest already accrued, though not yet due	6,640,583
Total	£15,626,685

Leaving as balance, real property of the Government, 5,567,304*l.*

During the present month the coin that will be disbursed from the Treasury will amount to 3,771,006*l.* That is, 2,071,006*l.* on account of interest accruing in the debt, and 1,700,000*l.* announced sales of gold by the

Treasury. On the other hand the estimated revenue from imports for December is about 2,000,000*l*.

Thus deducting 1,700,000*l*., from the present amount of coin in the Treasury (which is the actual property of the Government), it will be seen that the gold reserve of the Treasury at the beginning of the year 1870 will amount to 3,867,304*l*.

Receipts and Expenditures.

The receipts of the Government from all sources amounted during the last fiscal year to upwards of 64,000,000*l*.; the expenditure to 55,000,000*l*.

The Customs brought into the Treasury, in round numbers, about 36,000,000*l*. The internal revenue, 24,000,000*l*. Premium on gold sold by the Treasury and other miscellaneous sources, 4,000,000*l*. The sale of public lands, 600,000*l*. The direct tax, 100,000*l*.

The highest expenditure of the Government was entailed by the payment of interest on the public debt, and amounted, in round numbers, to 26,000,000*l*. The cost of the War Department amounted to 11,000,000*l*.; that of the Navy to 3,000,000*l*.

The civil, foreign, interior, and miscellaneous expenses of the Government amounted to upwards of 14,000,000*l*.

The revenue of the Government for the present fiscal year ending 30th June, 1870, is estimated at upwards of 68,000,000*l*.; the expenditure at 59,000,000*l*., and shows an estimated excess of receipts over expenditures of 18,000,000*l*.

During the first quarter of the year, which ended on the 30th September last, the excess of receipts over expenditures was 4,263,084, the amount of the former being 18,975,830*l*., of the latter, 14,712,746*l*.

The excess of receipts over expenditures for the fiscal year ending the 30th June, 1871, is estimated at 20,000,000*l*., assuming that the laws at present in force relating to Customs and internal revenue remain unaltered, and that no extraordinary appropriations will be rendered necessary.

The following Table shows in a detailed form the receipts and expenditure of the Government during the last fiscal year:—

RECEIPTS.

			£	s.	d.
Customs	..	..	36,019,685	4	0
Internal revenue	..	..	23,813,001	12	8
Public lands	..	..	604,563	1	2
Direct tax	..	..	115,140	13	10
Miscellaneous	..	..	4,175,357	17	2
Total			64,725,748	8	10

EXPENDITURE.

			£	s.	d.
Civil	..	..	1,871,234	16	5
Foreign intercourse	..	..	1,673,083	4	0
Miscellaneous	..	..	5,363,147	14	5
Interior department	..	..	5,341,284	18	9
War ditto	..	..	11,804,810	12	4
Navy ditto	..	..	3,007,632	15	6
Interest on public debt	..	..	26,138,848	8	0
Premium on ditto	..	..	60,000	0	0
Total			55,260,042	10	5

Excess of receipts over expenditure during the fiscal year, 9,465,705*l.* 18*s.* 5*d.*; of this excess about 3,000,000*l.* arose previous to the 1st March, and the remainder between that date and the 1st July.

A section of the law of the 25th February, 1862, which formed an essential portion of the contract under which the Government obtained a large sum for the 5-20 bonds it issued, provides for the purchase or payment of 1 per cent. of the entire debt to be made within each fiscal year, commencing from the 1st July, 1862, with which to form a sinking fund.

A compliance with the requirement of this law was rendered impossible, or, more perfectly speaking, inexpedient, under the late administration; and the former Secretary of the Treasury applied himself with great success to a work of importance, namely, that of funding the short obligations of the Government such as the 7-30 notes and certificates of indebtedness, which aggregated a total amount of about 300,000,000*l.*

The present Secretary of the Treasury on entering office in March last, commenced at once the sale of the surplus gold realized by receipts from Customs, and applied the proceeds to the purchase of bonds.

Thus bonds to the amount of 4,008,960*l.* have been bought and designated as belonging to the sinking fund.

Bonds have likewise been purchased to the amount of

11,086,400*l.*, and are held as a special fund subject to the action of Congress.

It is recommended by the Secretary of the Treasury that these latter bonds should be added to the sinking fund, and that any further purchases that may be made should be likewise added to it, until the gross amount shall constitute a fund equal to that which would have been created, if there had been no delay in the execution of the Sinking Fund Law.

The total amount of United States' Government securities bearing interest in coin was, on the 1st December, 1869, 421,587,600*l.* Of this amount 320,534,220*l.* are known as the 5-20 Bonds, the term having reference to the number of years, according to their respective issues, that they have to run.

The Secretary of the Treasury has already purchased, and is still purchasing a considerable amount of these bonds, and he estimates that by the 1st of July, 1870, he will have bought an aggregate total of them, amounting to 30,095,360*l.*

When he shall have done so, there will still remain in the hands of public creditors a balance amounting to 290,438,860*l.* Of this amount the Secretary considers it advisable that 50,000,000*l.*, at least, should be suffered to remain either for purchase or redemption previous to 1874.

By reference to the Statement of the public debt, given on a preceding page, it will be seen that the legal time allowed for the redemption of the greater portion of the 5-20 Bonds has already expired. The Secretary of the Treasury is desirous, therefore, of contracting a fresh gold loan, free from all taxation, at $4\frac{1}{2}$ per cent., with a view to offering the holders of 5-20 Bonds, that have already fallen due, the alternative of either accepting a new bond bearing a lower rate of interest, or of receiving payment of the principal of their bond.

In connection with the proposed plan the Secretary of the Treasury recommends that the National banks of the country should be required to substitute the bonds they at present own, and which they have deposited in the Treasury as security for the redemption of the notes they have issued, for the new bonds, and in case of any bank refusing to do so that its charter should be annulled.

The Secretary would wish to limit the new loan to

200,000,000*l.* or 240,000,000*l.*; one-third payable after fifteen and within twenty years; one-third after twenty and within twenty-five years; and one-third after twenty and within thirty years: the principal to be paid in the United States, and the interest either in this country, or in one of the leading money centres of Europe, as might be found desirable.

It may be remarked that the ability of the Secretary of the Treasury to negotiate a loan, at par, bearing interest at only $4\frac{1}{2}$ per cent. admits of considerable doubt, particularly when it is remembered that the securities of the Government, bearing 6 per cent. can be purchased to-day in the open market, at from 85 to 87.

The redemption of the depreciated and fluctuating currency of the country would doubtlessly tend more than any other event to strengthen the credit and fix the prosperity of the nation, but its realization appears to be as far distant as ever.

General Grant, in his first Presidential Message to Congress, after alluding to the evils entailed by it, states that the "methods to secure a cessation of them are as numerous as are the speculations on political economy," and he proceeds to make an addition to their already perplexing number by suggesting that the Treasury be authorized to redeem its own paper at a fixed price whenever presented, and to withhold from circulation all currency so reduced until sold again for gold.

He proposes that the currency be redeemed at its market value at the time of any law on the subject going into effect, and that the rate at which the currency should be bought and sold should be at the same rate of interest as the Government pays upon its bonds. In other words: taking the paper dollar at 75 cents to the gold dollar (premium on gold at 133) and adding 6 per cent. annually, which may be presumed to be the lowest rate at which the Government could borrow money, a return to specie payments would be effected by General Grant's plan in about six years; supposing no untoward circumstance should intervene to frustrate its operation in the meanwhile.

The plan would work in the following manner:—

On the 1st of January, 1870, 100 dollars in currency would command 75 dollars in gold.

In 1871	..	..	..	8	c.	
„ 1872	..	..	..	79	50	in gold.
„ 1873	..	..	..	84	0	„
„ 1874	..	..	..	88	50	„
„ 1875	..	..	..	93	0	„
„ 1875	..	..	..	97	50	„

Or nearly par with gold.

In the opinion of the Secretary of the Treasury the ability of the country to resume specie payments will not be due to any special legislation, but to the condition of its industries and to its financial relations to other countries, and he believes that so long as it is necessary to pay for merchandize imported into the United States by the transfer of Government bonds, or other evidences of indebtedness to other countries, so long will it be impracticable to resume and maintain specie payments.

It is worthy of note that a large class of Americans exists who are well satisfied with the present condition of the currency, and who are not only opposed to a policy of contraction, but regard with indifference the doctrine of resumption of specie payments.

In those portions of the Union, (the Atlantic and Middle States particularly) where the number of National Banks is larger, a freer circulation of paper money exists which has tended to raise the price obtained both for labour and merchandize.

A contraction of the currency would be considered by persons who are profiting by the inflation of prices as prejudicial to their interests.

In the Southern and Western States of the Union, where fewer National Banks have been established, a cry for more paper money is raised, and for the adoption of a system of free banking.

At present the issue of the National Banks is restricted to an aggregate amount of 45,000,000*l.* and the number of National Banks in the country was, in July 1868, 1,414.

Of this number there were 204 in the Southern States ; 290 in the Western States, and 920 in the New England and Middle States.

The disproportion will appear more marked when it is stated that, whilst in the State of Massachusetts there were 161 Banks, in the State of Illinois there were only 69 ; and whilst in the State of New York the number was as high

as 239, in the State of Mississippi there was only one National Bank.

It is not likely, however, considering the paramount importance of resuming specie payments, that Congress will authorize any further inflation of the currency. Some relief may, perhaps, be afforded by withdrawing the 3 per cent. certificates and issuing greenbacks in their stead, which would increase the circulation of paper money by 7,000,000*l*.

Nevertheless, the true interests of the country point to the expediency of an early resumption of specie payments which it is difficult to believe can ever be effected in any other manner than by a gradual contraction of the currency.

The opinion of the Attorney-General on this subject is worthy of note,—“ I am one of those, he says, who believed it was the interest as well as the duty of the Nation to return at once, as soon as active hostilities ceased, to the true and solid standard of value ; that we should have treated the currency as we did our armies,—regarding the volunteers and greenbacks alike as necessities of war, to be dispensed with as fast as possible on the return of peace. I think we made a great mistake in not doing so ; that the shortest method was the safest and best ; that the only way to reach the object is by a steady and persistent contraction of the currency, a painful process, whenever it comes, no doubt, but harder and worse for us the longer it is delayed.”

Sources of Income.—The amount of revenue collected from Customs ranks first in importance of the receipts of the Government, and yielded last year a sum of 36,019,685*l*. against 32,892,919*l*., the preceding one, being an increase of 3,126,766*l*.

There has likewise been a marked augmentation of imports during the first quarter of the present fiscal year, and there is every reason to believe that during the whole fiscal year, ending June 30, 1870, the amount of revenue that will be derived from Customs will not fall short of 40,000,000*l*.

It is a remarkable circumstance, and one well worthy of consideration, that notwithstanding the high rates of duties imposed by the existing Tariff, and which average from 45 to 47 per cent., the imports into this country are rapidly increasing.

The value of net imports of dutiable articles of mer-

chandise brought into the United States during the fiscal year 1869, amounted to 77,169,473*l.*; of articles free of duty, to 4,304,880*l.*; and of bullion and specie, to 3,930,955*l.* Making an aggregate total of 85,405,308*l.*

The following is a list of the principal articles imported, together with the amount, in round numbers, of their declared values:—

	£
Sugar	14,500,000
Woollen goods	8,044,000
Iron and steel	6,072,000
Coffee	5,000,000
Silk goods	4,500,000
Cotton ditto	4,112,000
Flax ditto	3,450,000
Tea	2,740,000
Tin	2,073,000
Breadstuffs	2,000,000
Wood, and manufactures of	1,650,000
Fruits	1,600,000
Leather goods (gloves, &c.)	1,600,000
Chemicals, drugs, &c.	1,450,000
Earthen, stone, and china ware	875,000
Glass	759,000
Lead	706,000
Tobacco (cigars)	670,000
Hemp	650,000
Soda and salts of	650,000
Wines	452,000
Coal	242,000
All other articles not enumerated	13,374,473
Total	77,169,473

The few articles admitted free of duty consisted chiefly of madder, raw silk, or as reeled from the cocoon, dye-woods in sticks, &c.

The value of domestic products exported from the United States during the year amounted to 55,122,318*l.*, and of re-exports to 2,181,550*l.* Making, after deducting 2,940,416*l.*, less excess of foreign goods in bond in 1869 over 1868, a total of 57,303,869*l.*

The following is a list of the eight principal articles of American export, together with the amount, in round numbers, of their declared values:—

	£
Cotton	26,330,350
Breadstuffs	8,000,400
Provisions (pork, &c.)	4,700,000
Tobacco	3,502,000
Wood, and manufactures of	2,867,000
Petroleum	2,500,000
Machinery	590,000
Sewing-machines	410,000
All other articles not enumerated	6,222,568
Total	55,122,318

The adverse balance—1868-69—of the national merchandize account amounted to 23,230,068*l*.

The movement of bullion and specie during the same period was as follows:—

	£
Exports	8,583,193
Re-exports.	2,844,483
Total	11,427,676
Imports	3,730,955
Total	7,696,821

Excess of specie and bullion exported over that imported.

The Special Commissioner of the Revenue estimates the total indebtedness of the United States with foreign countries during the fiscal year ended 30th June, 1869, at 41,533,348*l*., and, enormous as this sum may appear, he states that “the process of incurring indebtedness still continues as actively as ever.”

“Supposing,” he says, “the excess of specie and bullion exports to have been devoted exclusively to the liquidation of balances incurred on the merchandize account, the remaining difference to be settled for, in some other manner, would amount to 15,733,348*l*.” To this sum must be added the following other items —

	£
Obligations for interest (paid) estimated.	16,000,000
Excess of freights carried in foreign vessels	4,800,000
Expenditure of Americans residing out of their own country	5,000,000
Total	25,800,000
Balance on merchandize account	15,733,348
Total indebtedness, fiscal year. ..	41,533,348

No account is made in this estimate of the sums chargeable to smuggling and undervaluation of imports, which the Commissioner believes are counterbalanced by the undervaluation of exports.

The difference on the trade account of this country has heretofore been adjusted by the export of specie, and of United States' securities, chiefly five-twenties.

It should be borne in mind, however, that the available quantity of United States' gold-bearing bonds are nearly exhausted, and the day must come when there will be no more of them with which to pay foreign creditors.

The statement of the public debt shows that the total amount of gold interest bearing bonds is 421,587,600*l*.

Of this amount, from 160,000,000*l*. to 200,000,000*l*. is already held abroad. It may be calculated that United States' bonds, representing a value of 80,000,000*l*., are held by savings' banks, trust funds, &c., in this country, and cannot be touched. Bonds of a value of 80,000,000*l*. are the property of, and have been deposited in, the United States' Treasury by the national banks, as security for the redemption of the notes they have issued; and these bonds cannot be touched, unless, indeed, the process already alluded to of forcing the banks to accept other bonds, bearing a lower rate of interest for those already deposited by them, be carried into effect.

It would thus appear that, of all the gold-bearing United States' bonds, the available quantity remaining for exportation is little in excess of a value of 61,500,000*l*.

The question then arises as to the manner in which the United States will settle its yearly increasing deficit on the trade with other nations when there are no more bonds to do it with. Indeed, if the amount of imports continues increasing as at present, it is not unlikely that the strange spectacle may be presented to Europe of a country possessing enormous unrealizable resources and riches, but unable to pay its current obligations.

An increased amount of domestic exports would, of course, tend to diminish the trade balance against this country; but no augmentation of them can reasonably be counted on, except, perhaps, on a few articles of raw material, which at present form the chief exports of the country.

Indeed, it is a melancholy fact for the Americans that their policy of "protection" has resulted in raising arti-

cially the cost of production on all American manufactures, of rendering their exports (at a profit) impossible, and of isolating their market to the confines of their own territory.

Again, a decrease of foreign imports is hardly to be anticipated. The principal articles introduced into this country are those of necessity and comfort, which the people cannot dispense with; and when they cease having them, it may be inferred that they have become so impoverished that they cannot buy them.

Internal Revenue.

The receipts from this source of revenue amounted, during the last fiscal year, to 23,813,001*l.*, against 27,104,622*l.* during the preceding year.

The decrease was caused by the repeal of the taxes on manufactures, which had brought into the Treasury in the course of the fiscal year ended June 30, 1868, a sum of 8,480,134*l.*

The following Comparative Statement shows the aggregate receipts from the several general sources of revenue for the fiscal years ending June 30, 1868, and 1869:—

Sources of Revenue.	Fiscal Year 1868.			Fiscal Year 1869.		
	£	£s.	d.	£	s.	d.
Spirits	2,646,188	12	9	6,770,887	9	7
Tobacco	2,656,751	2	2	3,523,414	13	5
Fermented liquors	844,804	2	0	917,275	2	4
Banks and bankers	476,188	11	7	501,581	8	7
Gross receipts	890,378	1	1	947,518	12	4
Sales	651,869	3	7	1,234,111	2	8
Special taxes not elsewhere enumerated	1,475,058	17	8	1,323,527	0	8
Income	5,880,226	14	4	5,231,858	0	5
Legacies	215,374	2	8	187,193	10	8
Successions	185,109	11	9	178,910	14	2
Articles in Schedule A	156,933	4	10	132,759	10	2
Passports	4,011	6	11	4,429	0	5
Gas	269,798	15	11	318,196	7	3
Collections not otherwise provided for	8,480,134	6	10	193,229	18	5
Penalties	178,281	1	6	131,893	1	0
Stamps	2,106,702	8	3	2,469,279	14	0
	27,117,810	3	10	24,066,065	6	1
Difference caused by not extending the calculation		0	6	10	1	
Total	£ 27,117,810	10	8	24,066,066	16	2

The returns opposite "Collections not otherwise provided for" are from taxes on manufactures and occupations now exempt from tax (with the exception of 6,741*l.* "excess of gauger's fees" in 1869). No collections were received from these sources in 1868.

The law provides that the fees of a gauger of spirits shall not exceed 37*l.* 12*s.* a-month. All sums in excess of this amount are therefore paid to the collector, and by him turned over to the Government.

Formerly all special taxes, or licenses as they were then called, were included under one class. In the present system of classification all special taxes relating to spirits, tobacco, fermented liquors, and banks, are returned under those headings respectively, and the balance reported under "Special taxes not elsewhere enumerated."

Articles in Schedule A include taxes on carriages, plate, watches, and billiard tables.

The attention of the present administration has been directed to the prevention of the manifold frauds practised on the Government with regard to the non-payment of taxes on spirits.

That no inconsiderable success has been achieved will be shown by the fact that whilst, during the fiscal year ended June 30, 1868, the sum of 2,646,188*l.* only was collected on spirits, last year the sum of 6,770,887*l.* was derived from the same source, an increase of 141 per cent.

This large increase, however, was not wholly due to the improved system of collection, but is partially to be accounted for by the fact that a large quantity of spirits, amounting to upwards of 24,000,000 gallons, were, in accordance with the provision of a Law to that effect, withdrawn from the bonded warehouses in which it had been stored, and the tax levied on it.

The rate of tax imposed on spirits during the fiscal year ended June 30, 1868, amounted to 6*s.* the gallon, but was reduced last year to 1*s.* 6*d.* the gallon; and the increased proportion of revenue collected under the latter rate is a proof that lower taxes do not necessarily lessen productiveness.

Thus, too, in the case of cigars the amount of revenue collected on them in the year 1866 when the tax was at a uniform rate of 30*s.* per 1,000, only 347,443,894 cigars were returned for taxation, whilst last year at a uniform

rate of 15s. per 1,000 the number returned amounted to 991,535,934l.

The amount of taxes collected on tobacco during the last fiscal year 1868, was 2,656,751l., and last year 3,523,414; an increase of 25 per cent.

The amount of tax collected on incomes during the last fiscal year was 19 per cent. less than that collected on the previous year.

Owing to a reduction last year in the staff of subordinate revenue officers the expense of assessing and collecting the internal revenue was decreased from 1,244,936l. in 1868, to 1,020,372l.

During the last fiscal year the sum of 43,000l. was distributed to Customs revenue officers as a reward for detection of frauds on the revenue, or, in other words, that sum was awarded as a bonus to incite officials to a proper and honest performance of their duties.

The want of a properly constituted Civil Service is very keenly felt in this country.

The failure of the Government to raise the greatest possible revenue from stamps, has suggested the idea of sending an agent to Europe to examine the stamp systems of foreign Governments.

A fraudulent practice prevailed very extensively in this country of covering the supposed half of one revenue stamp by the attachment of another when in fact the stamp was cut in two, and one-half used to represent a full stamp in another instance.

The Commissioner of the Internal Revenue believes that the present system of internal revenue, if faithfully administered, ought to yield a revenue from spirits, tobacco, fermented liquors, incomes, salaries, stamps, banks, legacies, and gas companies of not less than 26,015,037l., in which case a remission could be effected of the special and license taxes and all others that rest upon the labour, industry, and smaller business transactions of the country.

It is estimated that at least 90 per cent. of the entire internal revenue receipts are collected from a few objects and sources all of which may be classed as luxuries, or as the accumulated and associated wealth of the country.

A comparison between the amount of taxes collected under the internal revenue during the first six months of the present year, with that collected during the corre-

sponding period last year, shows the following satisfactory results—

From January to June 1869, inclusive 13,615,452*l.* ;

From January to June 1868, inclusive, 9,146,091*l.* :

Total gain for the above period, 4,469,361*l.*, or 40 per cent.

	£	s.	d.
The gain on distilled spirits during the period of comparison amounted to ..	2,523,947	4	4
On Tobacco	717,117	16	5
„ Incomes, including salaries	313,345	8	3
„ Sales	292,489	15	6
„ Stamps.	127,897	4	8
„ Gas	20,252	13	8
„ Banks and bankers	20,104	19	3
„ Fermented liquors	13,710	7	6

Miscellaneous.

The amount received by the Government from miscellaneous sources during the last fiscal year was 4,173,357*l.* against 6,659,444*l.* derived from the same source during the preceding year, and showing a decrease of nearly 2,500,000*l.*

Under this heading is comprised the receipts from premium on gold sold by the Treasury, by fees collected by the Consular Agents of the Government, and a variety of other items.

The large receipts of the Government from miscellaneous sources during the fiscal year ended 1868, were of an entirely exceptional character, and were occasioned by receipts incidental to the final closing up of war accounts, such as sale of captured and abandoned property, internal and commercial, coastwise, intercourse fees, &c.

The premiums obtained on sales of United States' securities were also very high that year.

Direct Tax.

This tax is levied by Acts of Congress, respectively dated 5th August, 1861, and 7th June, 1862, which authorize the collection, each year, of a sum amounting to about 3,000,000*l.*, from the several States of the Union apportioned upon each of them with regard to their respective populations.

The collection of this tax has only been made once, having been, from time to time, suspended by different Acts of Congress. The quota allotted to the loyal States

was obtained without difficulty, but, as the tax was levied during the war, that portion of it that had to be drawn from the eleven insurrectionary States was only finally paid up last year.

It rests with Congress to decide whether or no a continuance of the direct tax will be enforced in future.

It will most probably be discontinued.

Public Lands.

The sum received by the Government on account of public lands amounted during the last fiscal year to 604,563*l.* The total quantity of acres disposed of was 7,666,151; or, 1,000,000 more than were disposed of in the previous year.

The number of acres entered under the Homestead Law was 2,737,365; or, upwards of 400,000 more than in the preceding year.

The quantity of public lands still at the disposal of the Government, exceeds 1,700,000,000 acres.

Sources of Expenditure.

Interest on the Public Debt.—The interest on the public debt amounted last year to 26,138,848*l.*; or about 2,000,000*l.* less than was paid on the same account during the preceding year.

Civil Service.—The Civil Service entailed an expenditure of 1,871,234; or 176,000*l.* more than was disbursed on the similar account on the preceding year.

Under the heading of Civil Service is comprised the cost of Congress (including charges for stationery, books, and salaries of Senators and Members of the House of Representatives), the Executive and Judiciary Departments, and the Government in the territories; expenses of officers of the Mint, Supervising Inspectors, Surveyors-General, &c.

Senators and Representatives receive a sum of 1,400*l.* for a term of Congress, which extends over two years. An allowance is likewise made them for journeys at the rate of 5*l.* 10*s.* for every 100 miles travelled over, on account of the public service, to and from Washington.

The salary of the President is about 3,550*l.*; he is at no expense of living, as everything, including house, is found him. The Secretaries of State, War, Navy, of the Interior, of the Treasury, of the Post Office, and the

Attorney-General receive each a salary amounting to about 1,134*l.* a-year.

The salary of the Chief Justice is about 940*l.* a-year, and of the seven associate Judges of the Supreme Court about 850*l.*

Foreign.—The cost of the foreign intercourse of the Government, including the salaries of the Diplomatic and Consular Service, amounted during the last fiscal year to 1,673,083*l.*, or 1,384,815*l.* more than was expended on the same account during the previous fiscal year.

It should be stated, however, that last year the sum of 1,440,000*l.* was paid for the purchase of Alaska.

Other items of the expenditure on the foreign intercourse of Government include the sum of 22,000*l.* paid for capitalization of Scheldt dues, and 12,000*l.* disbursed by the Department of State for the use of the Atlantic cable.

Miscellaneous.—The expenditure of the Government on account of miscellaneous charges amounted, during the last fiscal year to 5,363,147*l.*; or 256,480*l.* less than was spent in the previous year.

The following are some of the principal items included under this heading:—

Expenses of assessment and collection of internal revenue, 1,082,723*l.*; expenses of collecting revenue from Customs, 808,532*l.*; revenue-cutter service, 181,164*l.*; support and maintenance of lighthouses, 289,718*l.*; building of custom-houses and marine hospitals, 215,037*l.*; repair of public buildings and grounds in Washington, 157,066*l.*

Interior.—The disbursements made by the Interior Department are on account of pensions, Indians, judicial expenditure, such as United States' Marshals, &c., benevolent institutions, &c.

The sum expended during the last fiscal year amounted to 5,341,284*l.*; or 1,386,140*l.* more than was spent during the preceding fiscal year.

This increase was occasioned by a sum of 663,443*l.* paid in excess of the previous year on account of pensions.

An excess of 300,753*l.* was likewise appropriated last year over that of the preceding one on account of payment of Indians.

The total number of army pensioners is enormous, and there is reason to believe that undue facility is granted by pension agents in the admission of applicants.

On the 30th June, 1869, there were 185,125 names on

the pension roll; 23,000 having been added in the course of last year.

The total amount paid for pensions of all classes, including the expenses of disbursement, was 4,274,116*l.*; and for next year it is estimated that 4,511,278*l.* will be required for the same charge.

The number of invalid military pensioners is 81,579; who received last year an aggregate sum of 1,411,084*l.* The number of widows, orphans, and dependent relatives of soldiers was 103,546; who received a sum of 2,800,000*l.*

Navy.—The sum of 3,007,632*l.* was disbursed by the Treasury to the Navy Department during the last fiscal year, or 648,000*l.* less than was disbursed on the previous year.

On the 9th of March last the Navy of the United States consisted of 203 vessels of all classes, measuring 183,442 tons, and calculated to carry, when in commission, 1,366 guns, exclusive of howitzers.

Of these ships 151 were wooden, and 52 were iron-clad or monitors. Of the wooden ships 32 were sailing-vessels, 53 were steamers with some auxiliary sail; 44 were steamers without any efficient sail power, and 22 were without sail power of any kind. The iron-clads are all steamers relying wholly on steam under all circumstances. Of all these classes, 43 vessels (including store-ships), mounting 356 guns of every calibre, were attached to fleets or returning therefrom. There were in commission for special service six vessels mounting 36 guns, and six others at the various stations as receiving-ships. These, together with 14 tugs and small vessels attached to the various navy yards and stations, constituted the whole force of the navy at that time effective for immediate service.

It has been found necessary to offer for sale, on foreign stations, three of these vessels which were condemned as unfit for service, and unsafe to send home to the United States; and 25 vessels have been ordered home to the various United States' navy yards for repair and alteration, or sale.

At the time the present Administration entered office, last March, there was but one ship undergoing repair, viz., the "*Juniata*," at Philadelphia; four vessels, however, viz., the "*Richmond*," "*Franklin*," "*Kenosha*," and "*Guard*," had just previously been fitted-out, and left to join foreign squadrons.

The remainder of the Navy not in commission consisted of 46 iron-clads and monitors of every class, laid up at various stations, none of which had been overhauled since the close of the war, and could not be got ready for service without overhauling. Four of these monitors were, and are still, on the stocks and unarmoured. Six frigates and corvettes were also on the stocks, one of which has been launched, and 66 are said to be unfit for active service in future.

The present force of United States' vessels on cruising stations is distributed as follows :—

	Number of Ships.	Number of Guns.
European squadron	6	106
Asiatic ditto	10	72
North Atlantic ditto	12	76
South Atlantic ditto	4	43
Pacific ditto	13	111

Two of the ships on the North Atlantic Squadron are tugs sent to conduct the "Dictator."

The importance of strengthening the European and South Atlantic Squadrons is highly recommended.

As previously stated, the number of American vessels on service in various parts of the world in the month of March last was 43, of which 18 only were said to be in a condition for real service.

Since the new Administration has come into office the force of the United States' Squadrons has been strengthened by the addition of three vessels, and the energies of the Navy Department have been devoted to increasing the efficiency of the entire United States' Navy.

Since the 1st of March last, it is officially reported, 80 vessels in all have been repaired or altered, or put in process of repair, at the various navy yards of the country.

The work has entailed an expenditure of 2,397,255*l*.

The new Administration takes credit to itself for the work that has been already performed ; and the ships in ordinary are being put in condition for service.

With a view to securing the greatest amount of efficiency with additional economy at the same time, all the steamers, susceptible of it, which have been repaired

or fitted-out have been given full sail power and re-rigged, so that, without interfering with their speed or effectiveness under steam, they are now entirely independent of it, and are able to cruize wherever required, or, if need be, to go round the world without wear of boilers or machinery, and without consuming their coal, which is thus reserved for times of necessity or danger.

It may, however, be questioned whether this extreme economy may not produce a contrary effect to the one intended, regarding, as a whole, the efficiency of all the branches of the naval service.

The ship rig considered the most efficient for cruisers is to be given to forty vessels which are at present in process of alteration or under repair.

It is believed that the system of giving and requiring the general use of full sail power, besides its effect of making sailors both of officers and men will, on the vessels intended to be kept in commission (calculating that they cruize about two-thirds of the time) make an economy in the item of coal alone, as compared with that consumed under the old system, of more than 400,000*l.* a-year.

The Secretary of the Navy has disclosed, in a recent Report, with no small amount of candour, the present inefficient condition of the United States' Navy, which he characterizes as being at a "low ebb."

He believes the cause may be found in the vast expenditure of material during the late war; in the exhaustion which followed it; and in a sense of the burdens it had imposed, affecting alike the Navy Department, Congress, and the people.

The defective state, both of the *matériel* and the *personnel* of the Navy, is described in the following language:—

"We do not possess," says the Secretary, "at this time on any foreign station a squadron whose combined force would avail for a day against the powerful sea-going iron-clads which both France and England have on the same stations."

Again, "We have neglected, and are neglecting the means necessary to bring forward, educate, and attach to our service a competent and efficient body of American seamen. Those 'waifs of the ocean' who are now in any navy and now in any merchant-service, have little or no love of country or feeling of attachment for the flag, and

yet his class now so exceeds and preponderates in the United States' Navy over that known as 'old man-o'-war's men' as to impart a very undesirable character to the service."

With a view to correcting those short-comings, the Secretary urges the propriety of commencing the construction of at least ten sea-going iron-clads, and that four of them be built at once. He proposes that one or more of these vessels should be placed on each foreign station, and be prepared with the necessary reliefs. He likewise deems it advisable that the monitors designed for home defence should receive such additional armour as to render them invulnerable to the latest improvements in ordnance, and it would appear that most of the United States' monitors are at present useless without it.

It is also suggested that inducements be held out to persons, willing to do so, to undertake the construction of ocean steamers on plans approved by the Navy Department, subject in case of necessity to be taken up by the Government at an appraised value.

These vessels would become auxiliaries to the regular navy in time of war.

Great stress is laid by the Secretary of the Navy on the importance of the sub-marine torpedo as a branch of naval warfare.

A carefully selected torpedo corps has already been established, and experiments are conducted under the supervision of an officer of scientific ability.

It is stated by the Secretary of the Navy that as soon as a torpedo is constructed, and the particular locality and manner of its use determined, it can be stowed away as an inexpensive but most effective weapon of war.

These localities, the Secretary further states, have been made the subject of careful inspection by both branches of the military service, and both are thus prepared with the knowledge which only actual inspection can give.

The head-quarters of the torpedo corps have been established on Goat Island in Narragansett Bay at Newport, in the State of Rhode Island.

In order to improve the *morale* of the Navy it is suggested to raise up and educate a new class of men for warrant and petty officers, aiming to secure by this means a sufficient number of native-born seamen to supply

current wants, and to have a large reserve always ready for emergency.

It should be stated that the establishment for the education of apprentices for the Navy, stationed at New London, has been broken up in consequence of an inefficient system of organization.

It is thought advisable by the Secretary of the Navy that every seaman on the seaboard and on the lakes should be registered, and means taken to secure his service to the country on some settled terms in time of war. The United States' Government has no control over seamen in such a crisis. A civilian may be enrolled, and is subject to call, but no authority exists by which a sailor could be called to go on board ship to protect the harbours were an enemy thundering at the gates.

During the late war the Navy of the United States required some 60,000 men, and the Government only succeeded in getting vessels to sea at great cost. Bounties were paid at the rate of from 50*l.* to 60*l.* per man, exclusive of advances made on pay, and local, and State bounties. In some cases nearly 200*l.* have been paid for a single seaman.

A great want is felt in this country of proper navy yards combining a sufficiency of land area, with the necessary available water front.

Of the seven navy yards at present existing there are only four in which more than two or three vessels can be repaired at a time, and there are only three dry docks in all.

The estimates for the fiscal year ending the 30th June, 1871, are calculated at 4,241,454*l.*, to be expended on the following principal items: 1,142,857*l.* (in round numbers) pay of officers and seamen of the Navy, based on a force of 12,000 men—at present the number is restricted to 8,000; 1,052,631*l.*, repair and preservation of vessels; 559,773*l.*, repairs of buildings, docks, and incidental expenses in navy yards.

The pension roll of the Navy on the 1st November, 1869, was as follows:—

	£	s.	d.
1,342 invalids annually receiving ..	18,592	18	8
1,614 widows and children annually receiving	40,218	19	2
Total, 2,956 persons, receiving ..	58,811	17	10

In speaking of the construction of a ship canal across the Isthmus of Darien, the Secretary of the Navy avers that the time for action has arrived, and that it would be a matter of lasting regret if the people and Government of the United States were anticipated in this great work. He recommends the immediate commencement of investigations to be directed to that part of the isthmus with which the Government is unacquainted.

It will be remembered that this sister enterprise to the one of making a canal through the Isthmus of Suez, and which, if it be ever carried out, will open a highway from the Atlantic to the Pacific Ocean, has long attracted the attention of American Statesmen.

Unsuccessful negotiations, carried on with the Government of the Republic of the United States of Colombia, have hitherto retarded any progress in the matter.

Army.—During the last fiscal year the sum of 11,804,810*l.* was disbursed on account of the Army. Of this amount 2,808,759*l.* represented the pay of the regular Army, and 27,838*l.* the pay and allowances of instructors and cadets for the Military Academy at West Point.

It is proposed to augment the number of cadets at the Academy undergoing instruction preparatory to being commissioned as officers of the army, from 250 to 400.

Bounties and back pay due to volunteers involved an expenditure of 2,995,283*l.* against 6,056,233*l.* disbursed on the same account during the previous fiscal year.

The yearly extinction of this form of debt (the volunteers being all mustered out of the Service), accounts for the large decrease this year over last, on the cost of the War Department, amounting to a sum of 6,728,520*l.*

The expenses of the Quartermaster's Department during the fiscal year were 3,303,516*l.*, a reduction of 2,180,451*l.* on those of the previous year.

In February 1869, the number of civilians hired by the Quartermaster's Department exceeded 10,000, which has since been reduced to 4,000.

The current expenditures of the Medical Department were 35,122*l.*

The regular army of the United States consists of 1 battalion of Engineers, 5 regiments of Artillery, 10 of Cavalry, and 25 of Infantry. Last year the number of Infantry regiments was 45, but they have since been consolidated into 25.

Each regiment of the United States' army consists of one battalion only, and each battalion is composed of ten Companies based on a strength of 100 men each, but in point of fact containing 75 men only.

The maximum strength of the United States' army (on the basis of 100 men to each company) is upwards of 50,000 men, but the number available for actual service falls short of 35,000 men.

The General-in-Chief of the Army reports that there is not a single regiment that may be said to be in reserve. "All are on duty and more troops, which cannot be granted, are constantly called for."

He proposes that the Army shall be re-organized on the basis of twelve companies to a regiment, and seventy-five privates to a company, which would give an aggregate total of 44,785 men as the strength of the United States' army.

The following list will show, in a detailed form, the proposed organization of the Army, two majors being allowed to each regiment.

General	..	..	..	1
Lieutenant-General	..	..	..	1
Major-Generals	..	..	..	5
Brigadier-Generals	..	..	..	8
Colonels	..	..	..	40
Lieutenant-Colonels	..	..	..	40
Majors	..	..	..	80
Captains	..	..	..	480
First Lieutenants	..	..	..	960
Second ditto	..	..	..	480
Chaplain	..	..	..	40
Veterinary Surgeons	..	..	..	10
Sergeant-Majors	..	..	..	40
Quartermaster-Sergeants	..	..	..	40
Commissary-Sergeants	..	..	..	40
Band Leaders	..	..	..	40
Principal Musicians	..	..	..	80
Hospital Stewards	..	..	..	40
First Sergeants	..	..	..	480
Sergeants	..	..	..	1,920
Corporals	..	..	..	1,920
Musicians	..	..	..	960
Artificers, Farriers, and Saddlers	..	..	..	1,080
Privates	..	..	..	36,000
Total Commissioned	..	..	2,135	
Total Enlisted	..	..	42,650	
Aggregate				44,785

The cavalry have been supplied with Spencer and

Sharpe's carbines, altered to the use of the musket metallic ammunition. The infantry, heavy artillery, and engineers have been armed with the Springfield breech-loading rifled musket. All these arms have given general satisfaction.

There is, however, a weapon which may be said to surpass in efficiency any other that has as yet appeared, viz., the Remington gun. It combines great strength with the requirement of a far simpler manipulation in loading. In fact it can be loaded without the right hand being taken off the stock.

An improvement has quite recently been made in this gun which renders it peculiarly well adapted for cavalry use. A consideration of the merits of the Remington breech-loader (if not already known in Europe) would appear desirable.

The sea-coast forts of this country are undergoing a complete change. They were planned at a time when the 8-inch gun was the heaviest afloat, and before rifled guns came into use.

It is believed that casemate forts, no matter how re-inforced with iron, are unable to resist ordnance of the 15 and 20-inch calibre throwing shot over 1,000 lbs. in weight with a velocity of 1,500 feet per second.

The Board of Engineers, in New York, have laid down these five general propositions, which have been approved of at head-quarters, for application to all modifications of the sea-coast forts :—

1. The use of barbette batteries of earth with deep parapet, and a liberal number of bomb proof and magazine traverses.

2. The use of the heaviest guns practicable with carriages, admitting of the gun being depressed below the parapet for loading.

3. An abundant supply of heavy mortars.

4. The use of torpedoes.

5. Entanglements to hold a fleet long enough for destruction.

In the opinion of the General-in-Chief of the Army, Fort Winthrop, in Boston harbour, presents a favourable sample of a sea-coast fort. "No foreign army," he says, "will be likely to attempt a landing on our coast; all a hostile fleet can attempt will be to run by the forts and lay the cities under contribution."

The General believes that on land the United States'

troops can handle guns of heavier calibre and with more accuracy of aim, than any enemy can his, afloat; and that no armoured ship as yet built can long exist within the range of the United States' 20-inch guns, or even the 15-inch guns if skilfully handled. He recommends that the forts covering the cities of Portland, Boston, New York, Philadelphia, Baltimore, New Orleans, and San Francisco be pushed to completion as soon as possible. All other points, he considers, might be neglected for the present.

The sum of 1,828,316*l.* is submitted to the consideration of Congress as the estimated amount requisite for the construction of fortifications.

The General-in-Chief reports that "while the nation at large is at peace, a state of *quasi* war has existed, and continues to exist, over one-half of its extent, and the troops therein are exposed to labours, marches, fights, and dangers that amount to warfare; and were the troops withdrawn, or their numbers reduced, in Texas, the Indian country in Arizona, New Mexico, Montana, Idaho, or Alaska, as well as in some portions of the Southern States of the Union, a state of anarchy would ensue."

The duties of an United States' officer are arduous and multifarious. He is not unfrequently called upon to perform, at great personal risk, the functions of Indian Agents, Governors, Sheriffs, Judges, and Inspectors of Elections.

"In my whole army experience," says General Sherman, "I have never known the army officers so poor, and yet I believe they will continue cheerfully to endure their present position if they can see any hope of improvement in the future; though they do not expect any increase of pay, a diminution of it would turn the thoughts of every good officer to a change of profession that would be extremely damaging to the army itself."

The fact is, army officers and that class, generally, of persons who live on fixed incomes and salaries are the worst off to-day in this country, and are the greatest victims to the high prices of living at present ruling, and to the evil effects of a depreciated currency.

With regard to the distribution of the United States' Army, the greater portion of the artillery is quartered in the permanent forts along the seaboard.

Every one of the ten regiments of cavalry is at present serving west of the Mississippi River, either in Texas, the Indian country, or in the Pacific territories.

The twenty-five regiments of infantry are distributed as follows—one along the northern frontier, one in Virginia, one in Mississippi, three in other of the Southern States, and nineteen in Texas, the Indian country, and in the Western States and territories.

The continuance of hostilities with Indian tribes imposes a harassing service on the troops of the United States' army, and a satisfactory solution of the Indian question would appear to be far distant.

The Indians, however, who are settled on the extensive and fertile territory that has been especially set apart for them to the immediate west of the State of Arkansas are progressing towards a state of comparative civilization.

The Cherokee tribe may be particularly instanced; they own about eleven millions of fertile acres of land, have a regular Government, judiciary, and schools, &c.

It is desired by the United States' Government to effect the settlement of the numerous Indian tribes on this particular territory, and thus obviate the serious complications that have arisen with them.

Hitherto separate reservations have been given to each tribe, which have, however, been gradually surrounded and invaded by white settlers, and the Indians have been "crowded out" of their homes and forced to negotiate for new settlements. If the Indian tribes can be gathered into larger reservations the experiment of self-government by the tribes themselves is to be attempted, and the agents of the United States' Government withdrawn. It is, likewise, suggested that delegates should be ultimately sent to Congress by the Indians.

Representation chosen by the tribes themselves, and responsible to themselves, is believed to be the only mode of making the country acquainted with their condition, and with the nature of its obligations to them. The failure of Congress to supply the means for a strict compliance with the terms of Treaties entered into with Indian tribes has occasioned a feeling of distrust on their part of the national Government.

The condition of Indian affairs is nevertheless represented as having improved within the last year, greatly aided through the persistent efforts of the Society of Friends to that end.

Persons, however, of experience in Indian affairs enter-

tain strong doubts of ever reclaiming the tribes to any great extent from their present state of wildness.

General Sheridan, who commands at present on the plains, speaks of Indians in the following discouraging strain :—

“The Indians,” he says, “have run riot for many years along the lines of our western settlements, and along the emigrant and commercial lines of travel, murdering and plundering without any adequate punishment.

“The Indian is a lazy, idle vagabond. He never labours, and has no profession except of arms, to which he is raised as a child. A scalp is constantly dangled before his eyes, and the highest honour he can aspire to is to possess one taken by himself.”

These opinions will doubtlessly be concurred in by many men who have been thrown in contact with the Indians, and who are inclined to regard them as a hopelessly unredeemable race of savages, which is doomed to disappear in company with the buffalo before the overwhelming march of a more civilized and enlightened population.

(Signed)

FRANCIS CLARE FORD.



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